HOW DO SCHOOL LEADERS NEGOTIATE SPACE IN ORDER TO MOTIVATE TEACHERS

by

Johann Burger

Thesis Presented to fulfillment of the requirements of the Degree of Master in Education Policy Studies in the Faculty of Education at the University of Stellenbosch

Supervisor: Nelleke Bak

March 2013
ACKNOWLEDGEMENTS

I would like to acknowledge and thank:

- Our Heavenly Father God Almighty through Whom all is possible.

- My beloved family for their inspiration, support and encouragement. My wife, Barbara, my daughter, Sigrid, and my son, Richard, who knew why I was doing my research, and offered me so much understanding for the hours spent in my study and away from home. My late mother, Mavis and late father, Schalk, who both inspired me by saying that you can do it. My brother, Schalk, who suggested, while the two of us were still at school, that I should study to become a teacher.

- My supervisor, Prof Nelleke Bak, for her patience, her intellectual prowess, and knowing how to guide me through challenging and uncharted research.

- My dear friends, Richard and Annatjie Goedhals, who offered me kindness, friendship and inspiration, and a home away from home during the week; Nita Joubert (Schmidt), for her positivity, love of education and giving me feedback on my scripts; Dr David Taylor for spending so many hours proof reading and correcting my scripts grammatically, and Nelis Koegelenberg, for his honesty and encouragement.

- The inspiring and dedicated lecturers at the Department of Education Policy Studies at Stellenbosch University. Prof Aslam Fataar and the Faculty of Education for the handsome academic bursary. The Stellenbosch University’s gesture of offering me a bursary motivated and inspired me more than any money could do.

- The three outstanding principals who took part in this research.
DEDICATION

This thesis is dedicated with love to two inspirational and talented children,

Sigrid (Sigl) Burger and Richard (Richie) Burger
ABSTRACT

This is an exploratory study of how school leaders can negotiate the various spaces in their schools in order to promote teacher motivation and, by implication, learner achievement. This research focuses on how three principals in the Western Cape Province have produced or re-appropriated spaces to create new, productive learning environments which positively engage the users of these spaces.

According to section 4 of the Employment of Educators Act 76 of 1998 (PAM), all school leaders are expected to create a learning space that is conducive to teaching and learning. In order to know what such a leadership responsibility may entail, this study tries to capture the dynamic interplay between physical (perceived) and mental (conceived) spaces as embodied in social (lived) spaces in a school. It uses Lefebvre’s spatial triad as its theoretical lens.

Linked to the study’s aim to investigate what the interplay is between the various Lefebvorean spaces in schools, is an examination of how school leaders can manage to negotiate the production of these spaces. For lived school spaces to have embodied meaning that is conducive to teaching and learning, they must be co-produced and co-owned by the users of that space. To illuminate the way in which school leaders can achieve this, the study draws on a model of transformational leadership.

The qualitative study uses a focus group, individual interviews and observations of three schools that have all achieved recognition as schools with excellent learner achievement: a public primary school, a public high school and an independent high school. The main research findings are that each of the three school leaders instinctively followed a transformational leadership style, and produced spaces that encouraged professional interaction amongst their teachers as well as strong collegial support for their spatial changes. The staffrooms have been modernised and equipped with lush furniture, flat screen TV’s, appealing decorations and stimulating pictures, all with the purpose of lifting the spirits and energy levels of the staff. In addition, teachers’ professional meeting rooms and confidential workspaces have been established. Classrooms have been changed into inviting and functional 21st century
ICT learning spaces, with flexible use of furniture and stimulating visuals. Outdoor learning spaces and safe “emotional zones” have been constructed. At all three schools the entrances and receptions areas have been made into welcoming spaces in which learners can gather for meetings, and the schools’ symbols and achievements are showcased. Clear signposting makes the visitor feel engaged. Braai areas for teacher and parent functions ensure that the school keeps parents involved.

The main findings about the embodied spaces in the school are that the three school leaders have changed the physical spaces at their schools into new mental spaces which influence the perception, mood and motivation of the users of that space.

Key words: Transformational leadership, Schools, Space, Lefebvre, Perceived space, Conceived space, Lived space, Negotiation, Production and Teacher motivation.
OPSOMMING

Hierdie studie verken hoe skoolleiers die verskillende ruimtes in hul skole kan aanwend ten einde onderwysermotivering, en gevolglik ook leerderprestasie, te bevorder. Die navorsing konsentreer op hoe drie skoolhoofde in die Wes-Kaapse provinsie ruimtes geskep of heringerig het om nuwe, produktiewe leeromgewings teeweg te bring wat die gebruikers van hierdie ruimtes op 'n positiewe manier by onderrig betrek.

Ingevolge artikel 4 van die Wet op Indiensneming van Opvoeders, Wet 76 van 1998 (PAM), moet alle skoolhoofde 'n bevorderlike ruimte vir onderrig en leer skep. Ten einde vas te stel wat sodanige leierskapsverantwoordelijkheid behels, probeer hierdie studie die dinamiese wisselwerking tussen fisiese of waargenome (“perceived space”) en voorgestelde of veronderstelde (“conceived space”) ruimtes beskryf soos dit in die sosiale of belewingsruimtes (“lived spaces”) in 'n skool vergestalt word. Die navorsing gebruik Lefebvre se ruimtelike triade as teoretiese lens.

Benewens die studiedoelwit om ondersoek in te stel na watter wisselwerking daar tussen Lefebvre se verskillende ruimtes in skole plaasvind, val die soeklig ook op hoe skoolleiers die skepping van hierdie ruimtes kan hanteer. Belewingsruimtes in skole sal slegs oor die nodige vergestalte betekenis beskik om onderrig en leer te bevorder indien die gebruikers van daardie ruimtes dit help skep en as hul eie aanvaar. Die studie put uit 'n model van transformasionele leierskap om lig te werp op hoe skoolleiers dit kan bereik.

Hierdie kwalitatiewe studie gebruik 'n fokusgroep, individuele onderhoude sowel as waarnemings in drie skole wat bekend is vir hul uitnemende leerderprestasie: 'n openbare laerskool, 'n openbare hoërskool en 'n onafhanklike hoërskool. Die hoofbevindinge is dat elk van die drie skoolleiers instinktief 'n transformasionele leierskapstyl volg en ruimtes geskep het wat professionele wisselwerking tussen hul onderwysers sowel as sterk kollegiale steun vir hul ruimtelike veranderinge aanmoedig. Die personeelkamers is modern ingerig met gemaklike meubels, platskermtelevisies, aantreklike versierings en stimulerende prente, wat alles ten doel het om personeel se geesdrif en energievlakke te verhoog. Voorts is professionele
vergaderlokale en vertroulike werkruiumtes vir onderwysers tot stand gebring. Klaskamers is omskep in aantreklike en funksionele, 21\textsuperscript{ste}-eeuse IKT-leerruiumtes, met buigsame gebruik van meubels en stimulerende visuele elemente. Buitelugleerruiumtes en veilige ‘emosionele sones’ is ook geskep. By ál drie skole is die ingange en ontvangslokale in aanloklike ruimtes verander waar leerders vir vergaderings kan byeenkom en die skole se simbole en prestaties ten toon gestel word. Duidelike aanwysings betrek besoekers onmiddellik by die skoolomgewing. Braaigeriewe vir onderwyser-en-ouergeleenthede verseker ook voortdurende skakeling tussen die skool en ouers.

Die hoofbevinding oor die belewingsruimtes in die skole is dat die drie skoolleiers die fisiese ruimtes by hul skole in nuwe geestesruimtes omskep het, wat die opvattings, gemoed en motivering van die gebruikers van daardie ruimtes beïnvloed.

**Trefwoorde:** Transformasionele leierskap, Skole, Ruimte, Lefebvre, Waargenome ruimte, Veronderstelde ruimte, Belevingsruimte, Onderhandeling, Produksie, Onderwysermotivering
DECLARATION

I declare that How Do School Leaders Negotiate Space in Order to Motivate Teachers? is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Johann Richards Vivian Burger

Signed: .............................................

Date: 19 October 2012
# TABLE OF CONTENTS

**ACKNOWLEDGEMENT**  
**DEDICATION**  
**ABSTRACT**  
**OPSOMMING (AFRIKAANS)**  
**DECLARATION**

## CHAPTER 1: INTRODUCTION
1.1 Introduction and background  
1.2 Rationale for the study  
1.3 Overview of the literature  
1.4 Aims of the research  
1.5 Methodology and methods  
1.6 Chapter outline

## CHAPTER 2: SCHOOL LEADERSHIP
2.1 Introduction  
2.2 Leadership, Management and Principalship  
2.2.1 Leadership  
2.2.2 Management  
2.2.3 Principalship  
2.3 The importance of leadership in school functioning and performance  
2.4 Main tasks and responsibilities of school leaders  
2.5 The changing role of and challenges facing school leaders  
2.6 Transformational leadership  
2.7 The Sigmoid Curve  
2.8 The Department of Basic Education (DBE) and Western Cape Education Department’s (WCED) preferred school leadership style  
2.9 Conclusion

## CHAPTER 3: THE PRODUCTION OF EDUCATIONAL SPACE
3.1 Introduction  
3.2 The physical space - social place relationship
3.3 Lefebvre’s spatial ontology 54
3.4 Lefebvre’s spatial triad 59
   3.4.1 Spatial practice 60
   3.4.2 Representations of space 61
   3.4.3 Representational space 61
3.5 The value of good design 63
   3.5.1 The value of design in healthcare 64
   3.5.2 The value of design in educational environments 65
3.6 What is a learning space? 67
3.7 Lefebvre’s triad applied to school spaces 68
   3.7.1 Physical space 68
   3.7.2 Mental space 68
   3.7.3 Social space 69
3.8 Conclusion 70

CHAPTER 4: TEACHER MOTIVATION
4.1 Introduction 71
4.2 Teacher motivation 72
4.3 Physical spaces, teacher motivation and teacher well-being 74
4.4 Conclusion 76

CHAPTER 5: RESEARCH METHODOLOGY
5.1 Introduction 78
5.2 Methodological framework: Pragmatism 79
   5.2.1 The origins of pragmatism 79
   5.2.2 Principles of pragmatism 82
   5.2.3 Pragmatism: Lefebvre and the new urban transformation approach 83
5.3 Qualitative research 87
5.4. Research methods 89
   5.4.1 Focus groups 89
   5.4.2 Observations 92
   5.4.3 Sample selection 94
5.5 Ethical considerations 94
   5.5.1 Consent 94
5.5.2 Right to withdraw 95
5.5.3 Privacy and confidentiality 95
5.5.4 Recording 95
5.5.5 Storage and security 96
5.5.6 Reporting 96

CHAPTER 6: DATA ANALYSIS
6.1 Introduction 97
6.2 Analysis of qualitative data 97
6.3 Historical context 98
6.4 The inherited physical spaces that needed change 99
6.5 The process of transforming new spaces 108
6.6 The new transformed physical spaces 125
   6.6.1 Reception areas 126
   6.6.2 Classrooms 130
   6.6.3 Staffrooms and meeting spaces 139
   6.6.4 School grounds 142
6.7 The reaction and emotive responses of users to the new lived spaces 148

CHAPTER 7: SYNTHESIS AND A SUGGESTED WAY FORWARD
7.1 Introduction 152
7.2 The research findings 152
7.3 Limitations of the research 157
7.4 Suggestions for future research 158
7.5 Conclusion 159

List of References 161
Appendices 194
CHAPTER 1

INTRODUCTION

1.1 Introduction

Space influences how we think, what routes we take, decisions we make and how we feel and act on a daily basis. This research will be an attempt to understand the concept and the importance of space in a school and how it could be put to good use. Ultimately the aim of the research is to enable school leaders to use perceived, conceived and lived spaces in an effective manner so that it motivates learners, teachers and parents. Not much research has been done on the specific link between leadership, space and teacher motivation in order to determine its influence on learner achievement.

This thesis is an exploratory study into understanding how transformational school leaders can and do negotiate space in order to promote teacher motivation and, by implication, learner achievement. The research examines the physical, mental and social spaces that school leaders co-construct or produce at their schools in an attempt to improve the mood, attitude, behaviour and motivation of the users of those spaces, and that hopefully could lead to improved results.

In order to investigate this, the thesis sets out to do the following:

- identify the roles and functions of transformational school leaders with regards to teacher motivation;
- discuss the main categorisations of space in a school environment;
- examine the theories underpinning teacher motivation;
- clarify the conceptual link between the use of space and teacher motivation or the “wellness” of teachers;
- understand the role of space in the dynamics of creating more productive educational communities; and
- identify some of the challenges facing a school leader that might limit him or her in fully using the school’s space.
As a former teacher, principal and presently a deputy chief educational specialist working for an education department, I have become acutely aware of the challenges that school leaders are facing as well as the pressures they are under from both the education department and from the parent body to perform well. They are held accountable for everything that might happen at their schools and have the responsibility to ensure that the staff work as a team and achieve results in a safe and happy environment. I have had the privilege of observing how certain schools that are facing numerous challenges and outside pressures have become centres of excellence. It is not just the learner achievements that are noteworthy, but especially how certain schools ensure the buy-in and support from all their constituents (learners, teachers and parents). They achieve this because the three principals have created safe and happy perceived, conceived and lived spaces at their schools in which both learners and teachers flourish. School leaders of such schools understand the importance of space and have acquired the skill of co-producing it in ways that support the school’s aims. The users of the space perceive the school in a new and positive light, their moods and levels of motivation rise and they feel encouraged to contribute more than is expected towards the school.

This thesis focuses on the spatial theory of Lefebvre (1991), with its triad of perceived, conceived and lived spaces. However, it also draws on elements of pragmatism because it is human action - the bridge between ideas and the actual world - that leads to the construction of space. John Dewey (1859-1952) who was perhaps the most influential and productive of the early pragmatists, emphasised intelligence, process, and the notion that organisms are constantly reconstructing their environments as they are being determined by them (Granger, 2006). This ties in well with Lefebvre’s (1991) notion that humans actively produce and re-appropriate space.

On one of my visits to a particular school I found out how much the neglect of the physical and mental spaces at the school was negatively influencing the staff. They told me that they feel physically sick when entering the school grounds. Soon thereafter the staff convened and drew up a petition wherein the authorities were asked to have the principal removed and stated that “he was not good for their school”. Their main complaint was that they could not bear “being demotivated any longer” because, as they put it, “we were once a highly motivated team” before the
principal was appointed. The principal was, however, a kind and dedicated teacher who loved teaching. The question that arose was what was causing the intense negative feeling at the school?

A school's staffroom is a very important embodied space. It ought to be a place of sanctuary away from the hustle and bustle of children running around. It is supposed to be a place where teachers get a warm, welcoming and pleasant feeling when entering and where they go in order to relax, unwind and refresh mentally before going back to the classrooms. The mental picture that I took on entering the staffroom of this particular school will stay with me for a long time. While the principal and I were walking down the corridor towards the staffroom, the principal complained bitterly that he had tried everything to motivate his staff. The school had paid a lot of money to get motivational speakers to the school, they held workshops on how to lift the teachers' morale but to no avail; the teachers stayed demotivated. It bothered him. On entering the staffroom I saw first-hand one of the reasons why the school was not working. The staffroom gave me an eerie feeling and at first sight it was dull and drab. Worn-through grey linoleum tiles covered the floor, the walls were grey (old government colour) and dusty, the curtains were faded and torn, the seating was hierarchal and in the corner was a broken photocopier with boxes of old books spilling out and onto the floor. There was an old book shelf with faded old magazines standing in a corner and on the pinup board was a paper cutting of an article of a principal who had won the National Teaching Awards for leadership in South Africa. Was this a hidden message the staff were trying to send to their principal? I could see why this school was falling apart. Bad leadership came to mind but far more important, the principal did not understand that space could be used to his advantage to improve the mood of his staff and raise the levels of motivation.

On the other hand, I have had the privilege of witnessing dysfunctional schools, with demotivated teachers becoming once again well-performing schools with motivated teachers after a change in school leadership had taken place. I am of the opinion that we cannot change much in education but the limited space that we do have at our disposal within schools can be used to make a difference in education. School leaders should be equipped with skills to be able to produce new physical, mental and social
spaces at their schools. If this could be done, both our learners and teachers will be better off.

My personal interest in the research topic is rooted in years of different leadership roles as a student, a Special Force soldier, a teacher, a principal, and now a deputy chief education specialist in an Education Department. In each of these roles I had to negotiate the spaces that I shared with my co-workers.

I started off as a principal at a school in the Western Cape Province in the same year that the South African Educational System jettisoned the “Apartheid Curriculum” and adopted a whole new curriculum called C2005, underpinned by an Outcomes Based Education (OBE) framework. The challenge that I had to face in those years was that the staff had to get used to a new curriculum, a new principal and especially a new way of doing things. The school was situated in a conservative farming community and I received immediate resistance. Some influential parents were angry about the shift in political power in the country and whatever the new democratic government proposed was met with resistance and suspicion. But I had a task of building up a new school that would embrace all facets of the new South Africa in the post 1994 era.

To be able to prepare the learners in becoming competitive global citizens, I started attending national and international conferences such as the International Confederation of Principals’ biennial ICP Conferences and networked with schools to collate their best practices. On my return, my staff and I would evaluate the best practices and see how we could make use of certain elements therein to benefit our school. The approach was initially a success, because we were facing our own challenges linked to the implementation of the country’s new “OBE” curriculum.

The first resistance that I experience took me by no surprise because it came from certain post level 1 teachers who did not embrace change. The biggest surprise, however, came from the School’s Management Team (SMT), the middle management leaders and a school leader’s supposed support base. It was clear to me that they had a political rather than an educational agenda and they continued to strongly resist my attempts at creating professional spaces to debate educational matters and research in order to position our school for the future. I became frustrated because I perceived them to be standing in the way of improving educational practices, by hanging on to and protecting their “safe and familiar” spaces, at the expense of the learners of the
I found myself in a very complicated situation as school leader. I had the law on my side, I could exercise the authority I had, but decided against it because there was much more at stake. I also realized that the staff had been at the school for many years and I was a newcomer to their turf. I had to win the staff over and get voluntarily support for the projects that I knew would benefit the school community.

I therefore had to come up with a couple of innovative and creative changes. My first task was to change the prevailing attitude and work ethic of the staff. I broadened the leadership base of the School Management Team (SMT) by appointing additional \textit{ad hoc} members, so that the power could be distributed, established accountable structures and reporting protocols, and made sure that everyone understood and could effectively and with confidence implement the new curriculum.

In addition to the gloomy mood of some of the teachers, the school buildings and classroom spaces needed urgent attention because they also contributed in some way towards the low morale. And so I set out to change the physical spaces at the school with the purpose of lifting the mood of its users. Parts of the school were painted or repaired, a music system that played classical music throughout the school was installed, the school grounds were cleaned, seating for learners was constructed in shady areas, the staffroom was made beautiful and teacher friendly, the parking area received shade-ports for the teachers' cars, and the entrance to the school was given special attention with the construction of a water feature, pot plants and a big “welcome” banner straddling the main entrance to the school. Geometric structures such as a one cubic meter “rubix cube” and other concept forming structures and diagrams were placed throughout the school to help the learners especially with understanding the concept of mathematics. The lengths of the corridors and the height of the ceilings or gutters were signposted against the walls to encourage the learners to look at the environment in a mathematical way. I am not sure to what extent the structures that were placed in the lived spaces helped the school’s learners with other academic work, but the school did receive awards from the minister of education for producing good results in mathematics and literacy.

In addition to improving the physical space, I encouraged the staff to take risks, regularly acknowledged them for the efforts they made and supported them to attend conferences. Furthermore, I did away with the school’s archaic code of conduct and
replaced it with a set of updated values and principles; displayed the school’s symbols, trophies, memorabilia that could make the users proud to be associated with the school; held special ceremonies to celebrate teacher and learner successes, and draped various representational flags in the school’s foyer. The learners were “set free” and did not have to line up, or walk behind one another in rows and were encouraged to talk and share their thoughts while walking in the passages between classes. The school became their school once again. I did away with non-sensical rules, such as banning the learners from entering certain spaces of the school, and opened up the whole school to them, giving them specific freedom in areas of the school which were linked to their stage of development. What followed amazed everyone. The learners decided by themselves, as “a matter of order”, to walk one behind the other, they kept left and were much quieter than before. Why did they do it? I surmise it was because they were given space to negotiate their own behaviour. They took ownership of the space in the school hall and felt that by being honoured and respected and became aware of their own responsibility towards the school. Their sense of co-ownership of the space changed their actions therein. Good behavior followed and space became a powerful ally. The learners’ opinions were asked and they felt free to give them, and became part of the school’s decision making process. They were given the task of recommending to the School Governing Body (SGB) how the school’s physical space could be improved and how it could be made more learner-friendly. They suggested “unique colours” for different spaces, suggested what should be taken off the school’s premises and what should be brought back on.

There was, however a downside to the picture that I have sketched above. After a couple of years of being the principal, and having had great support from the SGB, new elections led to new SGB members being elected who strongly resisted the innovations that I had started. I was seen as a threat and some powerful members of the rural conservative farming community spearheaded a campaign to have me removed as the principal of the school. Their attempt failed. However, it led me to rethink my own position and my educational approach towards the school. I realized that by changing the spaces at the school, I had started changing people’s routines and especially the way they perceived the school. There were a number of teachers who had been at the school for between 20 and 30 years, and their familiar spaces were becoming not so familiar anymore. They started fearing further change, and
therefore started to resist. To be successful I had to get the teachers’ and the parents’ buy-in. I realized that I had to change my approach once again and win them over by getting them to understand the importance of why the school should produce new spaces and how newly constructed spaces could benefit both them and the school in future.

I reached out towards the school and rural community, but this time from a different angle. I encouraged them to become part of compiling a new vision and mission statement for the school, set up structures that facilitated participation in this regard as well as in the school’s decision making processes, encouraged the teachers and parents to start engaging in school and educational matters. Once everyone had a clearer understanding, and fear of the unknown was removed, buy-in followed. They started making themselves available and started producing or suggesting new innovative physical and mental spaces at the school. The learners, teachers and parents loved being in these new spaces, started to understand the importance of space, and became motivated and inspired. In conclusion, I found myself as a school principal using space to shape my educational community.

By stimulating the teachers intellectually and encouraging them to reflect on their own and the school’s practices, a new climate developed in which educators felt part of the educational conversation. Fear was removed and teachers started sharing their best practices with one another and started inviting colleagues into their classes to attend lessons and give feedback. Best practices were seen and shared and better learner results followed. The learners’ success on the other hand, encouraged and motivated the teachers to do even more for them. The spiral of experiencing success and responding to it, continued at the school, and in the end exceptional learner achievement followed.

When I first met the teachers of my school, I viewed them as being negative and demotivated. When I left at the end of 2010, to accept my post as deputy chief educational specialist at the Education Department, I left behind a superb and highly motivated team, a team that I was proud of, who were professionally empowered, and ensured that learners were being taught in a safe, and stimulating environment.
1.2 Rationale for the study

Given my personal experience and interest in using educational space I have opted for my study to focus on the use of a school’s perceived, conceived and lived spaces. Furthermore it will look at how three transformational school leaders use those spaces in order to motivate and inspire their teachers, learners and other users.

Henri Lefebvre’s book *The Production of Space* (1991) had a major influence on my thinking especially about the concept of producing space and how space can be re-appropriated into something new. Lefebvre refers in his book to the re-appropriation of the Halles Centrales a former wholesale produce market in Paris during the years of 1969 to 1971. He says that for a brief period the urban centre, designed to facilitate the distribution of food, was transformed into a gathering place and a scene of a permanent festival. In short, it became a centre of play, rather than work, for the youth of Paris (Lefebvre, 1991:167). While reading this section of his book I wondered if we could transform the response of learners from “wanting to withdraw” to “wanting to engage” by producing new, exciting and inviting lived spaces at a school.

Lefebvre’s spatial triad made me realise that all along I too was constructing and producing space at my school, but had been doing so instinctively without knowing what exactly the literature or spatial theorists were saying about it. The theories of producing space illuminate good practices, and Lefebvre illuminated and explained to me what I had been doing without the benefit of clear strategies and objectives.

It follows that an important parallel aspect of this research is leadership. In order to co-produce effective spaces, a principal requires unique leadership skills to elicit the support and buy-in from his or her constituents. Another key component of eliciting and building support is motivation. This realisation led me to theories on leadership and motivation and how to apply these to a school situation. With this in mind my research question crystalized from my own personal interest in the subject and from what I had read in literature. The question that my research aims to answer, then, is how school leaders can use space in order to motivate teachers.

In South Africa, with its education system under tremendous pressure, clear understandings of effective school spaces, leadership roles and functions, and motivated staff are both relevant and necessary. Optimal use of space at a school
plays an important role in teacher (and learner) motivation, engagement and achievements at school (Pendlebury and Bak, 2002: 114-115). It also determines the general “happiness” of the school, influencing the ethos, and ultimately learner achievement (Fullan, 2001). However, I could not find many studies on the relationship between leadership, the use of space and teacher motivation (Howard, 2005).

Once my thesis has been completed, I hope to generate a user-friendly book with guidelines for school leaders with steps, strategies and measures to negotiate and co-construct their school spaces effectively, and so, hopefully, make their schools safe, happier and more productive places.

1.3 Overview of the literature

I shall proceed with an analysis of space as seen through the critical lens of Henri Lefebvre. His book, *La production de l’espace* (The Production of Space) was first published in 1974 (references in this thesis refer to the English editions, 1991). Lefebvre sought to establish a “science of space” by creating “a unitary theory of physical, mental, social space” (Lefebvre, 1991:7). Taking a Marxist perspective, Lefebvre argued that “producers of space have always acted in accordance with a representation (theory),” while users of space “passively experience whatever is imposed upon them” (Lefebvre, 1991:43). One of the aims of the proposed science was to see if it was possible for spaces to be “decoded” by their users and “read”. Lefebvre’s work has been widely cited by other theorists of space and architecture (for example, Park, 2006; Whyte, 2006), and his ideas on decoding and reading space can be applied to educational settings (Temple, 1988).

*The Production of Space* is a search for a reconciliation between mental space (the space of the philosophers) and real space (the physical and social spheres in which we all live). In the course of his exploration, Lefebvre moves from metaphysical and ideological considerations of the meaning of space to its experience in the everyday life of home and city. He seeks, in other words, to bridge the gap between the realms of theory and practice, between the mental and the social, and between philosophy (or the “imaginary”) and reality. To this end, Lefebvre develops a conceptual “triad” to explain the production and use of space: i.e. *spatial practice*, physical or perceived space (the relationship between the physical objects, material space and people),
representations of space, mental or conceived space (the codes and symbols in terms of which the space is conceptualised), both of which are embedded in representational spaces, social or lived space (the lived experiences of those in the space).

Lefebvre argued that every society produces a certain space, its own space, and by implication, every school produces its own space. An existing space, according to Lefebvre may outlive its original purpose and the raison d’être which determined its forms, functions, and structures; it may thus become vacant, and susceptible of being diverted, re-appropriated and put to a use quite different from its initial one (Lefebvre, 1991: 53). Although school spaces have a central function, i.e. to provide education and schooling, there may be unproductive spaces within the school which can be re-appropriated and used productively. This thesis will investigate the link between transformational leadership, the use of space and teacher motivation. Having productive educational spaces is likely to strengthen teacher motivation because of their experiencing a more conducive supporting environment. Their “lived space” is thus enriched.

Space is socially constructed with multiple and interwoven social relationships. It involves the production of material and symbolic practices in specific localised contexts, themselves produced within wider circuits of local, national, and global scales. Appadurai (in Christie, 2008) suggests that we should think of space in terms of the global world with overlapping landscapes of fluid, irregular shapes. He states that these landscapes bring people into complex and changing relationships where different perspectives give rise to different meanings.

Schools are both located within a globalised world and in a specific localised environment. Moreover, schools are the locus of educational networks. I think that an informed differentiated use of space at a school, not just the physical, could deepen school leaders’ understanding of the dynamics of and relationships between those who occupy it. It is this emphasis on dynamic networks that makes me want to explore how leaders negotiate (rather than merely construct) the school space. I shall be looking at how the school leaders co-produce and negotiate the spaces that are present at schools, in order to promote teacher motivation.
Lefebvre (1991) lays out the analytical territory of space, viz. the interaction among physical or material space, mental space and social space, and points out that production of space is tied up with power and politics, and the production of inequality. My thesis will use this premise as a point of departure. Underpinning the production of space I will postulate a pragmatist theory bridging the divide between idealism and realism. In conjunction with a Lefebvrean framework, this study will draw on pragmatism as an appropriate theory for thinking about the construction and production of space. The explanatory power of pragmatism lies in its central concept of (informed) human action that intertwines the world of ideas with the actual physical environment. Since my thesis focuses specifically on the negotiation of created spaces by school leaders, I draw on theories of leadership as well, especially those on transformational leadership because of its emphasis on change and relationships with others and, I will argue, with and within a particular space. Transformational leadership has been interpreted as the means by which school leaders can respond to the demands of reform to achieve appropriate and effective learning outcomes through turning the school into a “high reliability learning community” (Leithwood et al, 1999: 223).

A central feature of transformational leadership is direction-setting through the building and communicating of a commitment to a shared vision, and a positive response to high performance expectations (Leithwood et al, 1999 and Leithwood, 2005). This is to be achieved not just through structures and systems, but also by enabling the co-worker to “feel” the leadership: charismatic school leaders are perceived to exercise power in socially positive ways. They create trust among colleagues in their ability to overcome obstacles and are highly respected by colleagues (Leithwood et al, 1999: 57). Given the emphasis on relationship and change, the notion of transformational leadership fits well with Lefebvre’s notion of produced lived spaces.

Since my study will probe the notion of educational spaces and linking them to teacher motivation, I shall also be looking at theories of teacher motivation. Motivation has probably been one of the most often-researched subjects in the fields of psychology and education. It stems from the Latin word “movere”, which means to move or to carry. Therefore, it is only natural to define motivation as a force, one that makes us constantly move, act or do things. The psychologist Rogers (1962) claimed that
motivation arises from some need to achieve better standards. While Freud (1966) believed that human behaviour is made up of inner forces that reflect psychical energy, Skinner (1968) believed that motivation is a result of outer forces, called stimuli, that move humans. Furthermore, Atkinson and Raynor (1978) asserted that motivation is some kind of force that prevents people from losing or falling into failure. While McClelland (1985) claimed that motivation is related to success, Maslow (1954) theorised that it is some kind of force triggered by eight needs that he identified. From this weight of attention, it is not difficult to deduce that motivation underlies much of human behaviour (Weiner, 1985). However, finding what teachers and learners want and then aligning each individual’s wants with organizational needs can be complex.

My research study will start from the assumption that learner achievement is linked to teacher empowerment and teacher motivation. What that link specifically is, will not be the focus of my thesis, but it will build on the claim that teacher motivation is inexorably linked to learner achievement. Although learner achievement is part of the research background, my study will focus on the relationship between transformational school leaders, lived spaces and teacher motivation.

In the light of the above, this study which was conducted in the Cape Winelands Education District of the Western Cape Province investigated how three successful school leaders negotiated, created and produced space at their schools to motivate and inspire both teachers and learners. This study also set out to determine what natural type of leadership these three school principals display, and which could be associated with the production and re-appropriation of space at schools. What this research looked for was how the three principals used their leadership style, and combined it with the powers that are bestowed upon them, to be able to co-create with others new physical, mental and social spaces at their schools. This is seen within the context of motivating their teachers, to encourage learner achievement.

1.4 Aims of the research

This is an exploratory study into understanding how school leaders can and do negotiate spaces in order to promote teacher motivation, and by implication learner
achievement. In order to answer the main research question of the thesis, the following sub-aims will serve to provide a conceptual background:

- to examine transformational school leadership
- to discuss the main categorisations of space in a school environment;
- to understand the role of space in the dynamics of creating more productive educational communities;
- to identify some of the challenges facing a school leader that might limit him or her from fully using the school’s space, and
- to understand the basic principles of human motivation.

I shall study how three school principals (two from public schools and one from an independent school) shape and use their school’s environment (space) with the aim of improving the school community.

1.5 Methodology and methods

The theoretical framework of the thesis draws on transformational leadership, Lefebvre’s spatial theory, already described above, and the epistemology of pragmatism. Within this framework I have opted to conduct a qualitative study of three principals of successful schools and who have created innovative spaces at their schools. I have used a qualitative methodology because I wanted to capture the lived experiences of these principals and document their stories of how they work with the various spaces in their schools.

Furthermore, a qualitative study lends itself to looking at the meaning of the lived spaces as seen through the lenses of the three principals and how they have co-produced the spaces at their schools. This study is keen to discover how the principals perceived these spaces, what made them change these, what processes they undertook to effect the changes, and how the users responded to the new spaces.

For the empirical research of the thesis, I made use of interviews, a focus group meeting and observations as methods to gather data on both hard and soft facts, i.e. on both actual conditions and beliefs. I focused on a qualitative approach, analysing
leaders’ interpretation of their own practices and lived spaces, in addition to observing them in their schools.

1.6 Chapter outline

The research study will proceed in the following way:

In chapter 1, I give a brief introduction to the research about space by explaining the background to the research, why it is an interesting and relevant topic, how I came to decide on the topic and justifying its academic investigation, as well as the purpose, focus and designing the study.

Chapter 2 focuses on leadership and provides a broad literature and theoretical review of the differences between leadership and management. Although it lists various leadership styles, the focus of this chapter is on transformational leadership. The reason for this is to interpret the three principals’ natural leadership style in terms of Leithwood’s (2005) eight characteristics of transformational leadership, which theory he highlights as the preferred leadership style that is especially effective in times of change and transformation. Transformational leadership with a pragmatist action-orientated dimension sits well with this research because action is involved in the construction, production and re-appropriation of spaces at schools.

Chapter 3 examines and focuses on the theory of Henri Lefebvre (1991) as explained in his book, *The Production of Space*. This research draws on Lefebvre’s conceptual triad of spatial practice (physical space), and representations of space (mental space) as embodied in representational space (lived, social pace).

Chapter 4 provides a brief literature and theoretical review on motivation in general, as well as the factors that contribute towards teacher motivation. This chapter refers specifically to how school leaders can motivate their teachers or keep them from becoming demotivated, by effectively constructing physical and mental spaces that have a motivational effect on the users of space at schools.
Chapter 5 is a discussion of the research methodology, design and methods used in the qualitative investigation of this research on space. I motivate and outline my use of focus group and on site observations to capture the data.

Chapter 6 is an analysis of the data and gives an explanation of the main research findings. The analysis is grouped under four main considerations: what the principals perceived as problematic spaces that needed changing; the negotiated relations that principals used to effect support for change; the newly co-produced lived spaces; and the users' responses to them.

Chapter 7 gives a synthesis of the main findings, identifies the patterns and trends evident in all three schools, and sketches a possible research agenda for future studies.
CHAPTER 2

SCHOOL LEADERSHIP

2.1 Introduction

My thesis focuses primarily on leadership and within that focus, specifically on the negotiation and production of space by school leaders as a powerful yet underexplored dimension of leadership in schools. In order to clarify who and what constitutes school leadership, I shall be drawing on theories of leadership, especially those of transformational leadership because of its emphasis on relationships with others. The main concern of this chapter is to examine the leadership style that is appropriate for negotiating changes, especially spatial changes, in a school environment. This will provide a framework in terms of which I shall analyse my findings of the school leadership styles in chapter 6.

To reach a deeper understanding of leadership, I shall first highlight some key assumptions about leadership, then identify the conceptual differences between leadership and management. Thereafter the chapter will shift to an overview of leadership, with special reference to transformational leadership in South African schools. When I was looking for research studies done on school leadership and management, I became aware that relatively little research has been done on the topic in South Africa. Tony Bush and colleagues (2006) noted that most of the research done was not conceptually rich, and made a recommendation that research relevant to the South African context should be done. Ursula Hoadley and Catherine Ward (2008) agree with Tony Bush and comment that “the South African leadership research base is very limited” (Hoadley and Ward, 2008:11). Tony Bush and Jan Heystek (2006) have echoed this as well and state that South African universities rely primarily on literature from the United States and Britain in their teaching on school leadership and management. According to Hoadley and Ward (2008) the indigenous literature, based on South African research and experience, is developing but Bush and Heystek (2006) are of the opinion that a programme of research on leadership, management and governance practice in South African schools is lacking and is urgently required (Bush and Heystek, 2006:75).
This study aims to contribute towards the educational conversation on school leadership within a South African context and collate information on how three transformational South African school leaders produce and re-appropriate physical spaces in order to motivate their teachers with the aim of improving learner achievement at their schools.

2.2 Leadership, Management and Principalship

To clarify and enlighten the broad concept of school leadership, I shall first briefly distinguish between leadership, management and principalship. Christie (2010) argues that different expectations of school leadership together with a new policy framework have radically changed the work of the South African school principal (Christie, 2010:695). The concepts of leadership, management and principalship are often used interchangeably in the context of schooling (Bush, 2008; Christie and Lingard, 2001; Leithwood et al., 2002; Jossey-Bass, 2000; MacBeath, 1998). In probing the meanings of these concepts it is useful to distinguish between them while at the same time acknowledging their interrelationships.

2.2.1 Leadership

According to Botha (2004), school leadership deals with areas such as supervising the curriculum, improving the instructional programme of the school, working with staff to identify a vision and mission for the school, and building a close relationship with the community (Botha, 2004:240). Chemers (1997) sees leadership as a process of social influence through which one person is able to enlist the aid of others in reaching a goal (Chemers, 1997). Similarly, Van der Westhuizen (1997) holds that the school leaders’ role is to convince, inspire, bind and direct followers to realise common ideals or goals (Van der Westhuizen, 1997:187). Since leadership is directed towards achieving goals, it is often associated with vision and values (Christie, 2010:695). Christie (2010) suggests, however, that leadership may also be understood as a relationship of influence directed towards school goals or outcomes, whether formal or informal (Bennis, 1991; Burns, 1978; Kotter, 1996; Yukl, 1998). Christie notes that though leadership is often framed in terms of individual qualities, it should, however, be framed in terms of a social relationship of power whereby some are able to
influence others. Whatever the basis for leadership may be, it remains characterized by influence and consent rather than coercion. Nonetheless, as an exercise of power, it necessarily entails ethical considerations (Bottery, 1992; Grace, 1995).

Newmann and Associates (1996) argue that leadership in schools is not the preserve of any position, and can be found and built throughout the school (Newmann and Associates, 1996). They are also of the view that leadership can operate from the centre of the school rather than the top. Hartley (2009) agrees with Newmann and Associates (1996) and believes that leadership can be stretched and dispersed across people and functions. Leithwood (2006) holds that school leadership has a greater influence on schools and learners when it is widely distributed (Leithwood et al. 2006:12).

### 2.2.2 Management

According to Christie (2010) management, in contrast to leadership, is an organizational concept. Botha (2004) argues that management includes factors such as supervising the school budget, maintaining the school buildings and grounds, and complying with educational policies (Botha, 2004:240). Christie (2010) holds that management relates to structures and processes by which organizations meet their goals and central purposes. Arguably, it is more likely to be tied to formal positions than to persons (Buchanan and Huczynski, 1997). There is ample research to suggest that good management is essential for the effective functioning of schools (Christie, 1998, 2001; Fleisch and Christie, 2004; Roberts and Roach, 2006; Taylor, 2007). Their research confirms that if schools are not competently managed, the primary task and central purpose of the school - teaching and learning - is likely to suffer (Christie, 2010:696).

### 2.2.3 Principalship

Principalship, like management, is an organizational concept. It designates a structural position which carries with it responsibilities and accountabilities. Those who are in structural positions within an organization, as managers or principals, are bound by the goals and primary tasks of the organization, and their successes and failures are
judged in terms of these (Christie, 2010:696). They are officially accountable for the operations and outcomes of the organization – as in this study, schools. The principal represents the school formally, and it is principals who are also usually responsible for symbolic roles such as ceremonies, rituals and assemblies that take place in the physical spaces across the schools.

Christie (2010) argues that ideally, the concepts of leadership, management and principalship should come together in schools. She states that schools should have good leadership, at all levels, they should be well managed in unobtrusive ways, and principals should integrate the functions of leadership and management and possess skills in both. Leadership should be dispersed throughout the school; management activities should be delegated with proper resources and accountabilities; and heads should integrate vision and values with the structures and processes by which the school realizes these. Christie, however, admits that it is hard to integrate these three dimensions in the practices of running schools due to the complex nature of school leadership and especially in times of change (Christie, 2010:696).

2.3 The importance of leadership in school functioning and performance

Davies (2009) argues that inside every successful school you will find good leaders, who have the knowledge and personal skills in applying their power and influence in a sensible and transformational manner. He furthermore argues that research findings and school inspection evidence show that effective leadership and management are critical to a school’s success (Davies, 2009). Based on their observations of schools in England, the Office for Standards in Education in England (Ofsted) reported that where leadership and management are weak or ineffective in a school, it is so much harder for teachers to teach effectively and be motivated. In contrast, where leadership and management are effective, then not only can a teacher teach more effectively, but staff and students are better motivated, people know what is going on because communications are clear and frequent, and everyone feels that they are working as a team, working towards shared visions and goals, and good results follow (Ofsted, 2011, Sammons et al., 1995 and Leithwood and Riehl, 2003).
2.4 Main tasks and responsibilities of school leaders:

Chemers (1997) explains that the primary responsibilities of leaders are to provide:

- Guidance and motivation: to assign people to tasks or responsibilities, to outline what is expected, and to facilitate and encourage goal attainment.
- Problem solving and innovation: create the kind of atmosphere that encourages the sensitivity, flexibility, and creativity that allows the group to deal with uncertainty of new or complex demands (Chemers, 2007).

In line with Chemers’s first point, Barker (2001) discusses how a school leader’s prime task is to lead and motivate others and demonstrates how leadership styles adopted during decision making and change have a marked influence on organisational climate. He is of the view that an effective leader can renew the optimism and harness the relatively untapped potential of staff and learners alike (Barker, 2001:75).

Bukowitz and Williams (1999) hold that today’s leaders must pay attention to environments rather than rules, coach rather than tell, ask the right questions rather than provide the right answers. The result is more distributed decision-making system and greater voluntary participation (Hartley, 2009) The shift from being the source of all knowledge to managing the network of how knowledge flows lies at the heart of this new emerging leadership (Van Niekerk and Waghid, 2004).

Sergiovanni (2001), however, is of the opinion that we give too much attention to the instrumental and behavioural aspects of school leadership and life, and not enough to the symbolic and cultural aspects. According to Sergiovanni, this is unfortunate because symbolic and cultural aspects are more powerful than the instrumental and behavioural aspects in influencing things, in bringing about change, in contributing to effectiveness (Sergiovanni, 2001:23). This aspect of Sergiovanni’s theory on leadership is of particular importance, because “symbolic and cultural aspects” have a crucial influence on representational spaces at a school (Lefebvre, 1991). In the next chapter on space, I shall be referring to these forces in more detail in explaining the factors that influence the production of space, as Henri Lefebvre’s describes in his book *The Production of Space* (1991).
According to research done by Van Niekerk and Wagheid (2004), a 21st century school leader has nine key attributes which are emerging across the leadership domain. They are:

1. Giving vision, meaning, direction and focus to the organization (Bennis 1999:6; Marquardt and Berger 2000:31; Scholtes 1999:708; Senge 1990:346).
2. The ability to inspire and motivate co-workers (Bush and Glover, 2003; Chang, 2002; Manning 2002).
3. The ability to understand the variability of work in planning and problem solving (Gilley and Maycunich 2000:124; Scholtes 1999:708).
4. Understanding how we learn, develop and improve, and leading life-long learning and improvement (Bennis 1999:5; Marquardt and Berger 2000:1; Scholtes 1999:706).
6. Understanding the interdependence and interaction between systems, variation, learning and human behaviour; knowing how each affects the other (Scholtes 1999:706; Senge 1990: 359).
7. The ability to think in terms of systems and knowing how to lead systems (Gilley and Maycunich 2000:81; Marquardt and Berger 2000:1; Scholtes 1999:705; Senge1990:343).
8. The ability to integrate various methodologies for knowledge construction (Gilley and Maycunich 2000:124; Nonaka and Takeuchi 1995:156).

In line with these nine attributes Tannebaum and Schmidt (in Gerber, Nel & Van Dyk 1996:364) note the following three forces that they identify as having an influence on leader effectiveness:

1) Personality, knowledge, background and experience: All these factors can strongly influence the way a leader behaves. A leader who feels insecure may have leadership problems. It is particularly important, for example, for a leader to have self-confidence.
2) The forces that could influence the followers, including their expectations: The leader must know and understand the people they are leading. The better
the leader knows the people they are leading, the more effective his leadership. Each subordinate has expectations of how the leader will act towards him or her and expectations vary according to individuals.

3) The general situation may also affect a leader’s behaviour: The type of organisation and its traditions can affect the leader’s behaviour. Hughes (1999:13) asserts that the culture of an organisation affects how a leader attempts to lead as well as his/her perceptions about his/her organisational role.

According to Ramovha (2009:23), it is crucial that new school leaders study the culture of the schools which they are leading. This will enable them to know how to influence their followers in order to reach the desired goals. For the best-fit behaviour of leaders, they must be able to “diagnose” the human and organisational context so that they become aware of the forces that may arise as the environment is dynamic. In order to be more effective, Broadwell (1996) argues that school leaders should take cognisance of the maturity levels of individuals within the group in order to have a better understanding of the dynamics residing within the group. This could enlighten the school leader to the individual’s or group’s competency to perform a particular task (Broadwell, 1996:2).

The ever increasing expectations from within the school community and of the education department for principals to excel, can have its toll on the principal if he or she does not have an effective leadership style and the necessary skills to deal with these challenges in times of transformation and expectation. These are essential qualities that school leaders need to possess in order to ensure that the core function of a school, namely that learning and teaching takes place, in an appropriate space. Given the focus of my thesis, I contend that the transformational school leader should ensure that the perceived and conceived learning spaces are creatively produced and well-maintained.

2.5 The changing role of and challenges facing the school leader

Marquardt and Berger (2000) argue that the world is changing at a pace never experienced before and that leadership styles and skills that may have worked in stable, predictable environments will be inadequate in an era of radical uncertainty
(Marquardt and Berger, 2000). The result of these developments is the realization that organizations and schools need to learn how to adapt more quickly to changing environments, with leadership playing a central role in achieving the desired change (Marquardt and Berger 2000:1). The role of the school principal in the traditional school model was viewed as that of a manager or administrator. Traditionally, school principals had more managerial and administrative tasks, and fewer teaching duties (Pretorius, 1998:105). Botha (2004:240) is of the opinion that the description of the principal's role includes that of head educator (as used in England) and instructional leader (as widely used in North America). Both descriptions suggest a person that is knowledgeable in learning and teaching, and therefore position principals as learning experts (Terry, 1999:28; Parker & Day, 1997:83).

During the 1980s, principals were specifically encouraged to be instructional leaders who had to be involved in direct supervision of the instructional process and had to ensure that their schools remained focused on learning and teaching (Botha, 2004:239). This role of a "learning expert" (Johnson, 1997:79) remains important today, although principals are now expected to be not only learning experts but also experts in knowledge areas (Johnson, 1997:80). Botha (2004:240) argues that this is a point which was not emphasised in the past. Christie (2010) sees the landscape or changing role of the principal as a fluid concept. Christie uses the term loosely which she has borrowed from the work of Arjun Appadurai (1996:33), and argues that the landscapes that apply to the principal call for fluid and situated approaches rather than static and generic ones (Christie, 2010:695). Christie argues that different expectations of school leadership together with new policy frameworks have radically changed the work or role of the school principal. An unanticipated - and largely unacknowledged - consequence is that the complexity of this may have contradictory effects that might impede, rather than assist, school improvement in South Africa (Christie, 2010:695).

Terry (1999:28-32) believes that principals should be leaders in learning and not merely leaders of learning. Principals should understand contemporary theories of learning, should have an explicit personal theory of learning and should be able to utilise this knowledge. This does not mean that principals will have to “know-all”, but that they will have to understand key educational ideas and will be able to initiate or
promote those ideas that are appropriate to their school community (and more importantly reject those that are inappropriate). Conceptual and theoretical forms of knowledge are as important as tacit and experiential knowledge. This highlights the importance of principals as life-long learners in the modern school as well as in times of change (Botha, 2004:240).

For Hill (1996a:4), the central role of principals in the previous decade was the improvement of teaching and learning. Today, principals should spend more time establishing the appropriate preconditions and following through with interventions aimed at improving methodology of teaching and learning. In order for principals to be able to do this, they should be experts (or at least knowledgeable) in a variety of areas. Botha (2004) argues that the role of the principal is changing rapidly and recommends that the principal should be less administrative and more orientated towards being an educational leader in the sense of being an expert in teaching and learning, and in establishing a new environment that facilitates this (Botha, 2004:240). Botha’s argument chimes well with Lefebvre’s (1991) view that by producing space or by the re-appropriation of space you can change the behaviour of the users thereof, which is what this study will be looking at in chapter 3 on space.

Johnson (1997) argues than in these times of change and reform, principals have been encouraged to act as transformational leaders - people who are not only focused on a culture of learning and teaching, but who are also future orientated, responsive to the changing educational climate, and are able to utilise the symbolic and cultural aspects of schools to promote, above all, a culture of excellence in their schools (Johnson, 1997:81). Lefebvre (1991), for example, is of the opinion that the deliberate use of rituals, symbols and cultural aspects in a space sends out a powerful signal or message to which most people respond positively.

Caldwell (1997), however, sees the changing role of the school principal as one where the principal is someone who understands change and embraces the future as well. Furthermore, Caldwell's (1997:3) image of the future school leader is that of the educational strategist in which he or she continues to be an expert in the areas traditionally associated with instructional and transformational leadership, but in which special emphasis is given to the leader being able to formulate strategic intentions.
Caldwell (in Greenfield & Ribbins, 1993:78) emphasises that future school leaders will have to be knowledgeable about classroom and school effectiveness, and school improvement research. They will have to understand the resource implications of adopting various teaching and learning strategies. Gurr (1996:16) furthermore found that principals had an important role to play in connecting schools with the external world and bringing into schools a variety of knowledge.

According to Levine (2005) in a rapidly changing environment, principals no longer serve primarily as supervisors. They are called on to lead in the redesign of their schools and school systems and produce new environments that are conducive to learning and teaching. In an outcome-based and accountability driven era, administrators have to lead their schools in the rethinking of goals, priorities, finances, staffing, curriculum, pedagogies, learning resources, assessment methods, technology, and use of time and space. On the other hand they need to retain top staff members and educate newcomers and veterans alike to understand and become comfortable with an education system undergoing dramatic and continuing change. They have to ensure the professional development of both teachers and administrators (public servants) so that they can remain effective. They have to prepare parents and learners for the new realities and provide them with the support necessary to succeed. They have to engage in continuous evaluation and school improvement (such as IQMS and Whole School Evaluation), create a sense of community and belonging, and build morale in a time of transformation. According to Levine, these are just a couple of challenges facing a school principal (Levine, 2005:12).

There has been a great interest in educational leadership in the early part of the 21st century. This is because of the widespread belief that the quality of school leadership makes a significant difference to school and learner outcomes. In many parts of the world, including South Africa, there is recognition that schools require effective leaders and managers if they are to provide the best possible education for their learners. As the global economy gathers pace, more governments are realising that their main assets are their people and that remaining, or becoming, competitive depends increasingly on the development of a highly skilled work force. Human (1991) argues that for South Africa to become a global competitor, the country needs organisations
which encourage and promote learning on a continuous basis (Human, 1991:31). For this to become a reality, South African schools require motivated, dedicated and skilled teachers but they, in turn, need the leadership, inspiration and curriculum guidance of effective principals and the support of committed middle managers (SMT).

2.6 Transformational leadership

Literature suggests that transformational school leaders are best suited to lead their schools in the 21st century, because they fundamentally aim at fostering capacity development and higher levels of personal commitment to organizational goals on the part of their colleagues (Bass, 1990 and 1999; Bass and Bass, 2008; Davies, 2009; Leithwood and Jantzi, 2009; Hargreaves 1997; Podsakoff, Mackenzie, Moorman and Fetter, 1990; Sagor, 1992; Sergiovanni, 1996; Walker, 1993).

Transformational leaders are individuals who have exceptional impact on their schools, and they inspire followers through their personal vision and energy (Stoner and Freeman, 1989:480). They create schools where more people participate in decision-making and embrace the schools’ visions, missions and goals as their own (Botha, 2004). McCauley, Moxley and Velsor (1998:407) are of the opinion that transformational leadership embraces the concept of creating in people the inner commitment to social goals, and transforming a person’s self-interest into a larger social concern.

According to Burns (1979:20), leadership becomes transforming when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality. Different forms of leader-follower relations are found in transactional and transformational leadership respectively - transcending to higher levels of commitment by both leaders and followers (transformational leadership), as opposed to operating and interacting on a level that is adequate for effective performance (transactional leadership). The research I am doing on how three top achieving school principals negotiate space will be done with the transformational leadership model in mind, to see if their leadership style aligns itself with literature and theories describing transformational leadership. To this end,
this section of the thesis will therefore, illuminate and elaborate on key elements of transformational leadership.

Paul Houston (1993) states that many educators in the USA, believe that their schools are in serious trouble, and a number of these experts have identified the failure in leadership as one of the top reasons for the national dilemma over the quality of education (Liontos, 1993). Liontos (1993) goes so far as to claim that there is a call going out in the USA, not just for improved leadership but for a vastly different kind of leadership. This form of leadership - in addressing the challenges and changes up to the late 90s, and meeting the need for change within education in the 21st century - has been termed transformational leadership (Burns, 1978; Podsakoff, Mackenzie, Moorman and Fetter, 1990; Liontos, 1993; Walker, 1993; Sergiovanni, 1996; Hargreaves 1997; Bass, 1999; Davies, 2005; Leithwood and Jantzi, 2009).

Defining the parameters of transformational leadership is not straightforward. The word transformational is often loosely applied and has, according to Liontos (1993), become something of a cliché. The term transformational leadership was used in 1978 for the first time by James McGregor Burns, who conceptualised it in his book Leadership. Burns’ Leadership (1978) introduced two types of leadership: Transactional leadership where leaders focus on the relationship between the leader and follower, and Transformational leadership where leaders focus on the beliefs, needs and values of their followers. Bernard Bass (1985) and others soon entered the conversation on transformational leadership, and are still in the process of refining it.

The research done by Boal and Hooijberg (2001:526) suggests that transformational leaders also stress such factors as “intellectual stimulation” and “inspiration”. Davies (2005), however, suggests that transformational leaders are proactive about the vision and mission, shaping each member’s beliefs, values and attitudes while developing options for the future (Davies, 2005:5). Bass (1985) is of the opinion that transformational school leaders have the ability to motivate people to do more than they are originally expected to do and in the following ways:

Raising their level of awareness … about the importance and value of designated outcomes … Getting them to transcend their own self-interest for the sake of the team, organisation or large polity … Expanding their portfolio of
needs and wants from low level (e.g. physiological or safety) needs to high level (e.g. self-esteem or self-actualisation) needs (Bass 1985:76).

Burns (1978) was one of the first scholars to assert that effective leadership not only creates change and achieves goals within the environment, but changes the people involved in the necessary actions for the better as well: he suggests that both followers and leaders are ennobled. He described transformational leadership not as a set of specific behaviours, but rather an on-going process by which leaders and followers raise one another to higher levels of morality and motivation (Burns, 1978:20). Krishnan (2005) agrees with Burns that transformational leadership raises the level of human conduct of both leader and follower. Burns became famous among alternative leadership scholars because his model of transformational leadership included an ethical/moral dimension that, prior to 1978, had not been infused into any leadership theory (Liontos, 1993).

Liontos (1993) argues that transformational leadership is associated with restructuring, since school reformers usually advocate a change in power relationships (Liontos, 1993). Leithwood (1992), however, describes transformational leadership as a form of consensual or facilitative power that is manifested through other people instead of over other people. Liontos (1993:1) argues that the old way of leadership was hierarchical and authoritarian; the new way seeks to gain overall participation of others. Gultig and Butler (1999) agree with Leithwood (1992) and argue that for principals to remain effective in the ever changing educational dispensation, the challenge is for them to redefine the functions of leadership, since this is crucial for change to occur and to build democratic schools (Gultig & Butler, 1999:119).

Walker (1993), however, helps to clarify the essence of transformational leadership. She describes it as standing at the convergence of research on shared decision-making, teacher empowerment, and school reform (Liontos, 1993). Davies (2005) sees transformational leadership as aligning and altering attitudes, values and beliefs, all of which influence the culture of an organisation to unify its sense of purpose and direction (Davies, 2005:11). Krüger (2009) sees the value of transformational leadership as:
… the essence of steering the behaviour, which includes the steering of the cognitive and mental processes in the school. In doing so teachers are provoked to change and improve their education. Transformational leadership relates characteristics of effective leadership to the school leader’s role in school improvement. The effort is the creation of a professional learning community by the transformation from teachers to learners (Kruger, 2009:115).

Leithwood and Jantzi (2005), argue that all transformational approaches towards leadership emphasize emotions and values, and that this form of leadership assumes that the central focus of leadership ought to be on securing the commitments and developing the capacities of organisational members. They are of the opinion that higher levels of personal commitment to organisational goals and greater capacities result in extra effort and greater productivity (Leithwood and Jantzi, 2005).

According to Davies (2009), Leithwood and his colleagues (2005) have provided the most fully developed model of transformational leadership specifically for school organizations. They recognise that schools are unique and their transformational leadership model incorporates the following (Davies, 2009:46):

1. depends not at all on charismatic practices or leader’s characteristics;
2. assumes wide distribution of its practices and functions across roles within and outside the school;
3. focuses as much or more on building the capacity of staff as on motivating them;
4. takes the creation of opportunities for collaborative work among staff as a major challenge to be addressed;
5. acknowledges the independent relationships among leadership and managerial activities;
6. works toward the creation of roles in schools for parents and members of the community as partners and co-producers of student learning.

As the research I am doing will be focusing on leadership and the negotiation and production of perceived, conceived and lived space as described by Henri Lefebvre (1991), it is important to include the research that Walker (1993) has done on
transformational leadership as well. She sees transformational leadership as “three strands” that encompass the following elements:

1. A collaborative, shared decision-making approach - such leaders believe that organisational goals can be better accomplished by shared commitment and collaboration.
2. An emphasis on teaching professionalism and teacher empowerment - such leaders believe all teachers are capable of leadership and encourage them to be self-directed.
3. An understanding of change, including how to encourage change in others - such leaders are agents of change and are committed to educating learners for the 21st century (Liontos, 1993:2).

In addition to using Walker’s (1993) “three strands” of transformational leadership, I have chosen Leithwood’s (2005) conceptualisation of transformational leadership, which I intend using to interpret the way the three principals negotiated the production of space in their schools. Developing this model, Leithwood and Jantzi (2005) conceptualise transformational leadership along the following eight dimensions:

1. building school vision;
2. establishing school goals;
3. providing intellectual stimulation;
4. offering individualised support;
5. modelling best practices and important organisational values;
6. demonstrating high performance expectations;
7. creating a productive school culture; and
8. developing structures to foster participation in school decisions.

Bush (2003) notes that while transformational leadership does offer a comprehensive approach to school leadership, there are two major criticisms that can be levelled against it. Firstly, it provides a setting whereby a leader has control over staff and hence it runs the risk of appearing more attractive to the leader than the led (Bush, 2003:77). Secondly it has the ability to become “despotic” (Allix, as cited in Bush 2003:77) due to the heroic and charismatic characteristics that transformational leaders are encouraged to display. Bush expresses his concern about the power of
the leader in this type of leadership and the threat that it places on democratic organisations (Bush, 2003).

What Leithwood and Jantzi’s (2005) research has revealed, however, is that transformational leaders inspire and motivate their followers constantly with a shared vision for the future, and through a variety of mechanisms. They encourage their followers to carry out and construe their work in terms of strategic means, stressing ideals, optimism, positive expectations, change, eagerness, and abstract long-term plans. They connect the members’ sense of identity and self to the mission and the collective identity of the organisation. Furthermore, transformational leaders are an inspirational model for members; they challenge members to take greater ownership for their work, understand the strengths and weaknesses of members, and so align them with tasks that optimise their performance. Transformational leaders build collaborative relationships based on trust, warmth and honest engagement in order to be effective (Podsakoff, MacKenzie, Moorman and Fetter, 1990).

Davies (2005) warns that Leithwood’s model nevertheless requires discretion and adaptation on the part of the leader to be successful, and stresses that the leader needs to exercise judgement about what particular practices would be appropriate for a given situation. Leithwood is of the opinion that school leaders do not go about indiscriminately “setting high expectations” at every turn; rather, a transformational leader would look out for those opportunities, and choose the correct time, when modelling or talking about expectations is likely to have the greatest effect (Davies, 2009:46).

This is of particular importance and relevance to South African principals, who have had to manage change on a wide front since the birth of the new democracy in 1994. In addition to adapting to the political change and transformation in schools, and power struggles within the school community, principals have had to manage the implementation of three “streamlining” adjustments to the original curriculum (Curriculum 2005), which was first introduced into South African schools in 1998 (Government Notice 1445). Furthermore, the subsequent changes to the curriculum led to the Revised National Curriculum Statement (RNCS, 2004), which in turn is being replaced the Curriculum Assessment Policy Statement (2011), colloquially
referred to as the “CAPS”. The DBE started phasing in the CAPS in 2011, with the emphasis on the Foundation Phase (Grades R to 3) only. The rest of the phasing in process will be done in stages over a couple of years ending in 2014.

The principal, however, as head of the school’s curriculum, is required to ensure that capacity is built at school level, and has the responsibility of ensuring that the teachers are equipped with the necessary knowledge and skills, enabling them to implement these latest adjustments to the ever changing curriculum. On the other hand, teachers have had to deal with the increasing demands of the respective education departments, expecting learner performance to improve every year, and the public holding schools every year more accountable for having to do much more with much less (Davies, 2005). This squeeze in which both principals and teachers find themselves has the potential to erode teachers’ loyalty and commitment and could lead to cynicism, demoralisation and poor performance.

To ensure that a school keeps performing and teachers stay motivated requires a principal who is skilled in leading the school in a transformational manner, and who demonstrates a transformational leadership style (Leithwood and Janzi, 2005). Davies (2005) agrees with this, emphasising further that to be effective such a school leader will have the skills to exercise the right judgment of what is relevant or important, decide on these and choose the correct moment to share his or her thoughts or instructions carefully with the staff. In doing so he or she will manage the flow of information, monitor the execution of tasks carefully and be sensible enough not to overburden the staff, so that the teachers can remain focused and contribute positively towards learner achievement at school (Davies, 2005).

It would seem that transformational leadership includes aspects of numerous leadership styles: it is encouraging, collaborative, creates a productive school culture, develops a shared vision, and realises goals. Also given its emphasis on change and negotiation, it is this leadership style that I shall use as the framework for interpreting, assessing and interviewing the three school principals that have participated in this study.
2.7 The Sigmoid Curve

Davies (1997) argues that in the times of change, *transformational leadership* is an appropriate model for managing change and schools effectively. Davies (1997), however, sounds a warning to school leaders, that they should be acutely aware of their school’s performance, and in times of change, know if their schools are going through a period of success or not. Charles Handy, in *The Empty Raincoat: Making Sense of the Future* (Handy, 1994), employs an interesting conceptual tool called the Sigmoid Curve, in suggesting that most organisations rise and fall or expand and contract in a way very similar to a sine wave. This phenomenon, does not just apply to civilisations, organisations and businesses, it also applies in a large way to schools as well. It is therefore crucial that a school leader has a thorough understanding off these principles, so as to ensure the school remains a vibrant and dynamic institution, which will be relevant in the future.

![Graph 1: When to start a new Sigmoid Curve](image)

The challenge for leadership in successful schools is to spot when the school’s development is at point A (on Charles Handy’s Graph 1) and to reengineer it so that the school does not rest on its laurels when it is still improving. It must take the risk of moving on to a new Sigmoid Curve and not wait to change until it is moving...
downwards for example at point B. Handy (1994) explains the Sigmoid Curve as follows:

The right place to start that second curve is at point A, where there is time, as well as the resources and the energy, to get the curve through its initial explorations and floundering before the first curve begins to dip downwards. That would seem obvious, were it not for the fact that at point A all the messages coming through to the individual or the institution are that everything is going fine, that it would be folly to change when the current recipes are working so well. All we know about change, be it personal change or change in the organisations, tells us that the real energy for change only comes when you are looking disaster in the face, at point B on the first curve. At this point, however, it is going to require a mighty effort to drag oneself up to where, by now, one should be on the second curve (Handy, 1994:51-52).

Handy (1994) states that school leaders should be aware that all living things, organisations, civilizations, and for the purpose of this study schools have four stages to their life cycle, namely (1) inception, (2) growth, (3) maturity and (4) decline.

Hardy argues that change should take place during the growth phase, and should resemble a series on Sigmoid Curves that follow one after the other.

Graph 2: Series of Sigmoid Curves:

As I noted before, the leadership space in which principals have to operate is complex and changing rapidly, and principals need to have flexible leadership and managerial styles to manage the challenges they face on a daily basis. In addition to ensuring the effective implementation of the curriculum, learner achievement and staff development, they need to manage dwindling financial resources and rising costs at
their schools yet maintain the required high standards. Those principals who have inflexible leadership styles or lack the courage to implement change at the right moment in time or to produce new space at their schools find it most difficult being a principal and a consequence thereof their schools start to suffer (Leithwood and Steinbach, 1994).

2.8 The Department of Basic Education (DBE) and WCED’s preferred school leadership style

In South Africa, “transformation” has a special meaning linked to the need to convert the previous stratified system into a new framework stressing equity and redress. It was a case of a new government having to take on restructuring and redefining a whole system, to achieve the major aim of quality education for all (Department of Education, 2007). The new government came to power with a mandate to build a just and equal society, but was faced with the challenge of having to manage the country and change it at the same time. It had to build a democracy, develop the economy, and regulate society in line with values of human dignity, equality and justice (Christie, 2008). Within this framework, the government had to fulfil its electoral promise of dumping the “Apartheid” or “Bantu Education System” and start implementing a new curriculum, called Curriculum 2005 (C2005), which was based on the philosophy of Outcomes Based Education (OBE). This became a challenge because all the teachers in the country had to be re-trained to ensure the effective implementation of the new curriculum. Not all teachers embraced the change that was taking place and in certain cases became demotivated. It seemed that the schools that had made the transition most smoothly might have had school leaders who instinctively embraced an “agent of change” approach. The challenge was that principals were required to perform a dual function: first, to be managers who implemented the prescribed new curriculum, and secondly, to adopt a transformational leadership approach to ensure buy-in and acceptance from the teachers, learners and parents in order to maintain stability and growth at their schools.

According to the Department of Education (2008), a transformational leadership approach has the potential to engage all stakeholders in the achievement of educational objectives. Where the aims of school leaders and followers combine to
such an extent it may be realistic to assume a harmonious relationship and a genuine convergence leading to agreed decisions. In the South African context, “transformation” requires action at all levels but there are limits to what school leaders can achieve in the absence of appropriate physical, human, and financial resources.

The Department of Education (DoE) in South Africa, and the Western Province Education Department’s (WCED) both acknowledge that, in theory, transformational leadership and good management would ensure that schools run effectively and that learners would therefore achieve academically. The WCED has stated that transformational leadership is their preferred leadership style that will benefit the schools in the Western Cape Province (WCED/M3QSIC, 2003:3).

The Education Department’s main aim is to ensure that learning and teaching takes place, within well-functioning schools. Effectiveness requires calm and orderly schools and classrooms. Managerial leadership has certain advantages, notably for bureaucratic systems, but there are difficulties in applying it too rigidly to schools and colleges. If principals and educators do not “own” innovations but are simply required to implement externally imposed changes, they are likely to do so without enthusiasm, leading to possible failure (Bush, 2003:46). Since all three schools in my study have solid records of demonstrated success and performance, I shall be interpreting the principals’ production of new spaces in their schools in terms of a transformational model rather than a managerial one.

The South African Minister of Education has, in terms of section 4 of the Employment of Educators Act 1998, determined the terms and conditions of employment of educators and set these out in the Schedule of the Personnel Administrative Measures generally referred to as the PAM document. According to the PAM document, the DBE broadly expects the principal to produce, use and manage space at a school effectively. The PAM (1998) states the following:

Principals have to make regular inspections of the school to ensure that the school premises [infrastructure] and equipment are being used properly and that good discipline is being properly maintained.
This section in the PAM document refers to the physical space (buildings etc.) and intends the principal to ensure that the social spaces are being used effectively as well. Furthermore the PAM states that the principal, as a member of the School Development Team (SDT), is required to ensure productive pedagogical spaces. This is done through the annual IQMS appraisal system whereby the principal is required to regularly review (educators’) professional practice with the aim of improving teaching, learning and management in an appropriate space.

The Performance Measuring Instrument that is used to assess the use of space at South African schools is the IQMS QA3 document. The document is called Performance Standard 1 (PM 1), with the heading: “The creation of a positive learning environment.” Lefebvre (1991) would have referred to it as the checklist for the production of physical or “perceived” space (Lefebvre, 1991).

The first expectation that Performance Standard 1 sets, is to see to whether the educator creates a:

positive learning environment that enables the learners to participate actively and to achieve success in the learning process (IQMS, 2012).

The production, use, and management of the physical, social and pedagogical spaces, which are prescribed responsibilities of principals, link with Henri Lefebvre’s (1991) conceptual triad of spatial practice, representations of space, and representational spaces. For Lefebvre, “space may be said to embrace a multitude of intersections, each with its assigned location” (Lefebvre, 1991:33), and “space incorporates social actions, the actions of subjects, both individual and collective” (Lefebvre, 1991:33). I will look at this in more detail in the next chapter.

This thesis will furthermore investigate how school leaders encourage and influence their educators in producing effective learning spaces, and will focus on how they use, create and negotiate spaces at their own school to ensure teacher motivation and learner achievement. The focus will not be just on creating new spaces, but also on the effective use of existing spaces.
2.9. Conclusion

When it comes to the quality of teaching and learning, and teacher motivation and performance, then it is leadership that makes a difference at a school (Davies, 2005). Transformational leadership does not only create change and achieve goals within the school environment, it also changes the people involved for the better, and in doing so both followers and leaders are empowered.

The urgent call currently strong in the USA, not just for improved leadership, but for a vastly different kind of leadership (Liontos, 1993), has also been sounded in South Africa. Ms Naledi Pandor, former national minister of education, appealed in 1996 to school principals to stop being satisfied with mediocre work their teachers produce, because according to her, this acceptance of mediocrity impacts negatively on the culture of teaching and learning in South Africa. Pandor was emphatic that to change the negative attitudes of certain teachers requires new leadership and management strategies on the part of the principals. She said that South African school leaders should no longer simply wait for instructions or decisions handed down from government. The pace of change, and the need to be adaptable and responsive to local circumstances, requires that leaders and managers develop new skills and ways of working (Department of Education, 1996:13-14). The minister’s call to transform mediocre schools into functional learning centres, where learners start mastering the curriculum and start excelling, would make it essential that principals acquire the necessary transformational leadership skills, so as to effect these changes successfully.

Before I tackle the main question of this thesis of how a transformational school leader can effectively negotiate the educational spaces in a school, which will be discussed in chapter 6, I will examine the conceptual interpretations of what constitutes different spaces, and in particular, what different spaces are pertinent to a school in the next chapter that is on space.
CHAPTER 3

THE PRODUCTION OF EDUCATIONAL SPACE

3.1 Introduction

In this chapter I proceed with an analysis of space, adapting the critical lens of Henri Lefebvre and note the potential of his work to provide a rich and insightful exploration of organisational space within a school setting. His La production de l’espace (The Production of Space), first published in 1974 (references here are to the English editions, 1991) proposes a reconciliation between mental space (the space of the philosophers) and real space (the physical and social spheres in which we all live), enabling a move from purely metaphysical and ideological considerations of space to finding new meanings through its experience in the everyday life of home and city. He bridges the gap between theory and practice, between the mental and the social, and between philosophy and reality, ranging in his exploration through art, literature, architecture and economics. In this way he provides a powerful antidote to sterile theories of abstract space, seeking in the process to establish a “science of space” by creating “a unitary theory of physical, mental and social space” (Lefebvre, 1991:7).

Henri Lefebvre, a French Marxist, had a longstanding commitment to “urbanize revolutionary theory and revolutionize urban theory” (Goonewardena et al, 2008:i). Belatedly, Lefebvre’s reputation has grown exponentially as a leading figure in social theory, and his pioneering works on space, everyday life, and global urbanization have revitalized urban theory, geography, planning, architecture, and cultural studies (Goonewardena et al, 2008:i).

Drawing on the Lefebvrean focus on space, my thesis will analyse how three transformational South African school leaders negotiate and produce new innovative and creative spaces in an attempt to motivate their teachers in a school context. My study aims to conceptualize space as a product that contains (1) the social relations among school leaders, teachers, parents and learners, along with the specific leadership organization of the school; (2) relationship between the physical objects, the material spaces and the teachers and learners who occupy them; (3) the symbols,
rituals ceremonies and codes that shape the structure and function of the spaces; and (4) the emotional responses of users to their school spaces. In this I hope to show that spaces for coping or excelling are products of physical, social, moral, professional, and political processes enacted by school leaders, teachers and learners in the context of educational renewal, i.e. to assert an explicit link between transformational leadership and the motivational use of space in schools as organisations.

What seems to be an important contribution of spatial theories is the notion that spatial aspects create emotional experiences in teaching, and teachers are not excluded from these experiences. Spatial aspects such as physical closeness, social relations, moral values, emotive responses, professional ideas, and power relations are lived experiences within schools. Hargreaves (2001) uses the term emotional geographies to emphasise the spatial and experimental patterns of closeness and/or distance in human interactions or relationships within schools. He identifies five key emotional geographies of teaching: (1) sociocultural, (2) moral, (3) professional, (4) political, and (5) distance.

“Space” has sometimes been claimed as the distinctive province of geography, but in his book Society, Action and Space, Benno Werlen (1993) claims that such a position is not plausible. Space has no distinctive content and therefore cannot be the specific object of study of a particular discipline. His conclusion does not imply that spatial issues lose their interest; on the contrary, they become of core importance for the social sciences as whole. The concept of space, as Werlen indicates, is philosophically as problematic as that of time (Werlen, 1993:xii). Werlen states, however, that spatial problems within the concept of space, always refer to issues relating to action, space cannot cause or determine anything. (Werlen, 1993: xv).

Michel Foucault (1967) argues: “the present age may be the age of space . . . We are in the era of the simultaneous, of juxtaposition, of the near and the far, of the side-by-side, of the scattered” (Michel Foucault, 1967:175). Pierre Bourdieu (1991) expands further:

Appropriated space is one of the sites where power is consolidated and realized, and indeed in its surely most subtle form: the unperceived force of symbolic power. Architectonic spaces whose silent dictates are directly addressed to the
body are undoubtedly among the most important components of the symbolism of power, precisely because of their invisibility . . . Social space is thus inscribed in the objective nature of spatial structures and in the subjective structures that partly emerge from the incorporation of these objectified structures. This applies all the more in so far as social space is predestined, so to speak, to be visualized in the form of spatial schemata, and the language usually used for this purpose is loaded with metaphors derived from the field of physical space (Bourdieu, 1991:113).

Lefebvre in The Production of Space, responds to the challenge offered by the situationists who call out: “Change life!” and “Change society!” by answering back: “These precepts mean nothing without the production of an appropriate space” (Lefebvre, 1991:59)! Lefebvre lays out the analytical territory of space, viz. the interaction among physical or material space, representational space and lived space, and points out that production of space is tied up with power and politics, and the production of inequality. My thesis will use this premise as a point of departure.

In my work environment, as a Deputy Chief Education Specialist for the Western Cape Education Department, I visit schools on a regular basis. In doing so I have come to experience how principals see and engage with the different spaces that are present at schools. I have noticed that not many principals are aware that they can become architects through co-creating their own unique spaces, which can be put to good use if one agrees with Lefebvre that “every society produces a space, its own space” (Lefebvre, 1991:31), a perspective that I believe should apply to every school.

I will argue that sensitivity to this pragmatic link between ideas and activity is a characteristic of transformational school leaders, who are able to design and co-produce new physical spaces at their schools that will reflect their own personalities, shared values, educational philosophies and educational innovations which could influence the users of those newly designed spaces in a very positive way.

3.2 The physical space – social place relationship

The concept of place originates from architecture and urban design, where it gives meanings to three-dimensional structures, referred to as spaces (Wahlstedt, Pekkola
and Niemelä, 2008). The relationship between space and place is social: spaces are converted to places by people, their interpretation of space and their social interactions (Harrison and Dourish, 1996). Place is consequently a space with meaning, and that meaning can be private or socially shared in a *lived* space. *Placeness*, according to Wahlstedt, Pekkola and Niemelä (2008), is constructed through experiences, interaction with the place and social interaction with other people. The distinction is similar to that between a “house” and a “home”: a *house* keeps out the wind, rain and cold, but a *home* is where we live (Wahlstedt, Pekkola and Niemelä, 2008:1022).

Harrison and Dourish (1996) discuss the distinction between space and place as well. They state that a physical location, a space, starts to function differently when interpretations and expectations concerning that space evolve in the *minds* of its users, the *mental* space. Equally, two spaces may share similar spatial features but are still perceived as very different places as the users’ behaviour is adjusted accordingly. For example, a theatre and a church share similar features (such as spaciousness, lighting and orientation), but we understand their different functions as places (Harrison and Dourish, 1996). This study will also look at how newly produced or re-appropriated spaces at schools do not just change human behaviour, but also how the users of the spaces think, feel and act.

Alexander (1979:62), in referring to the work architects do, comments that “those of us who are concerned with building tend to forget too easily that all the life and soul of a place, all of our experiences there, depend not just simply on the physical environment, but on the pattern of events which we experience there”. The relationship between space and place is social, not technological (Harrison and Dourish, 1996). This implies that the transformation from space to place (or in Lefebvrian terms, “lived space”) can be seen as a *change* process in the users’ mental models, within *physical and mental* spaces (Wahlstedt, Pekkola and Niemelä, 2008:1024).
3.3 Lefebvre’s spatial ontology

Lefebvre (1991) identifies space as fundamental to our understanding and interaction with the world, and sought to develop an alternative theory of space that would clarify the role it should play. He posits space as the primary locus of lived experience in the world and has conceived an approach to space, which embodies the mental and physical to become the foundation of our engagement with the world. Lefebvre’s aim was to “expose the actual production of space by bringing the various kinds of space and the modalities of their generation together” (Lefebvre, 1991:16).

Lefebvre states that the thinking of Descartes (1644) was the decisive point in the working-out of the concept of space, and led to its mature form. Descartes had brought to an end the Aristotelian tradition which held that space and time were among the categories which facilitated the naming and classing of the evidence of the senses. With the advent of Cartesian logic, however, space entered the realm of the absolute. Space came to dominate, by containing all senses and all bodies (Lefebvre, 1991:1), a perception that Lefebvre challenges radically. In *The Production of Space*, Lefebvre makes a critical departure from the neo-Kantian and neo-Cartesian conceptions of space and focuses on *social space*, arguing that space is not inert, neutral, or a pre-existing given, but rather an on-going production of spatial relations. Lefebvre emphasises that the production of space situates itself firmly in a post-structuralist or post-modern critical discourse. He writes: “Social space is not a thing among other things, nor a product among other products: rather it subsumes things produced and encompasses their interrelationships in their co-existence and simultaneity – their (relative) order and/or (relative) disorder” (Lefebvre, 1991:73). Bourdieu (1989), however, argues that social space tends to function as symbolic space, the space of lifestyles and status groups.

The word “space” had for many years a geometrical meaning: the idea it evoked was simply that of an empty area. In scholarly terms, it was generally accompanied by some epithet such as “Euclidean”, “isotropic”, or “infinite”, and the general feeling was that the concept of space was ultimately a mathematical one, a Euclidian geometric space. As Lefebvre elaborates, this is that Euclidean space which philosophical
thought has treated as an “absolute”, and hence as reference (Lefebvre, 1991:285). Mathematicians, according to Lefebvre, appropriated space and time, and made them part of their domain. They invented spaces, and defined them in the language of mathematics that set out to classify all the spaces as precisely as possible. But the relationship between mathematics and reality - physical or social reality - was not obvious, and a deep rift had developed between the two realms. The proliferation of mathematical theories aggravated the “old problem of knowledge”. Lefebvre questioned how the transitions were made from mathematical spaces to nature in the first place, to practice in the second, and thence to the theory of social life, which also presumably must unfold in space (Lefebvre, 1991:2-3).

According to Lefebvre, space is also a container of relationships. He argues that space is powerful; space is anything but the passive locus of social relations (Lefebvre, 1991:32). Ross (1988), however, argues that the socially constructed nature of space has tended to be ignored, with space being typically considered “as an abstract, with physical contexts, as a container for our lives rather than the structures we helped create” (Ross, 1988, cited in Shields, 199:119). Nespor (2010) agrees with Lefebvre and states that the educational discourse usually treats the school as bounded system, a container of classroom processes and curricular texts, an institutional shell waiting to be filled up by the actions of teachers, learners, and administrators (Nespor, 2010:xii) Massey (2005) argues that space is not an empty container separate from human action; rather, the notion of lived space suggests that human action is constructed of dynamic interaction with the physical attributes of the environment and with others in that space.

Learners and teachers are, however, inclined to view school space differently from that of their principals. Learners, for example, focus on school spaces that can be reworked for their own uses and those spaces become important to them and they start occupying them and start using them (Nespor, 2010:117). On the other hand, teachers’ frames of reference, the spaces of their practice and school space, are not just their physical classrooms, but also their learners’ bodies, considered as bounded containers of attributes and behaviours. Nespor explains that when a teacher’s space is defined by the bodies of his or her learners, the learners’ bodily behaviours become the focus of attention in that space. For example, in certain schools, desks are
arranged to regulate conduct, avenues of communication, and lines of sight and some teachers use space to regulate learners' bodily activity in the classroom as a "spatial container" of relationships (Nespor, 2010:125). Willis (1981) argues that in a simple physical sense learners, and their possible views of the pedagogical situation, are subordinated by the constricted and inferior school space they occupy (Willis, 1981:67). This approach could be demoralising not just for the teachers but for the learners as well. School leaders should, however, be aware of this and should encourage their teachers to construct and use physical school spaces effectively with the aim of motivating and inspiring their learners which would lead to them becoming further motivated themselves.

In contrast to the orthodox scientific view, Lefebvre offers the critique that our knowledge of the material world is based on concepts defined in terms of the broadest generality and the greatest scientific abstraction. He asserts that the links between these concepts and physical realities are not always clearly established, but that while we know that such links exist, and recognise the concepts or theories they imply - energy, space, time, these can be neither conflated nor separated from one another. He states that when we evoke “energy”, we must note that energy has to be deployed within a space. When we evoke “space”, we must immediately indicate what occupies that space and how it does so. And the deployment of energy is in relation to “points” and within a time frame. Space considered in isolation is an empty abstraction; likewise energy and time (Lefebvre, 1991:12). It follows, therefore, that when we consider the physical space that a school occupies and the energy that the users therein bring forward, it becomes clear that the school leader needs to be skilled to effectively combine the two factors, both space and energy, in co-producing and re-appropriation of new and more effective school spaces.

Watkins argues that, in general, spaces generated to explore the social world are very much an abstraction, a mental construction, and have become disassociated from the physical and social realities of lived experience. Like Lefebvre, Watkins (2005:210) is of the opinion that an abyss has opened up between the theories of space and the empirical world of actions, interactions and understandings, leaving our lived experiences estranged from the conceptions that meaningfully represent them. This notion of space as a “mental thing” or “mental place” has been inherited by the
majority of current forms of epistemological enquiry. For Lefebvre, the dominance of these mental spaces is exceptionally problematic. For him, the prominence of such abstract constructs in our societal modes of perception has led to the circumscription of the range of understandings, and thus actions with which we may engage in everyday life.

To have a better understanding of the construction of space, Lefebvre stated that the aim is to discover or construct a theoretical unity between “fields” which are held separately. The fields are first, the physical - nature, the cosmos; secondly, the mental, including logical and formal abstractions; and thirdly, the social. He says that within this framework we should be concerned with logico-epistemological space, and the space of social practice, the space occupied by sensory phenomena, including products of the imagination such as projections, symbols and utopias (Lefebvre, 1991:11-12 and 33). Fataar (2010) reminds us of the point that space, or “lived space”, is produced by human agency. In addition, Lefebvre notes that the uses of space are classed, gendered and racialised (Lefebvre, 1991). Space is socially constructed with multiple and interwoven social relationships. It involves the production of material and symbolic practices in specific localised contexts, themselves produced within wider circuits of local, national, and global scales. Appadurai (in Christie, 2008) suggests that we should think of space in terms of the global world with overlapping landscapes of fluid, irregular shapes. He states that these landscapes bring people into complex and changing relationships where different perspectives give rise to different meanings.

Ngwane’s (2002) study of a rural town in South Africa’s Eastern Province illuminates and provides a deeper understanding of school space and educational renovation. Ngwane’s (2002: 270-288) article uses the analytical lens “social construction of space” to understand the dynamics involved in constructing localised schooling processes. According to Fataar (2007:601) an attempt is made in Ngwane’s study to accord space active constitutive social power. Gulson (2005:141–158) supports this by means of a study he had done on urban reform in the London inner city. Fataar holds that the literature on social-spatial processes in urban contexts provides an analytical framework in understanding the notion of space and the compositional relationship between localised dynamics and schooling processes (Fataar, 2007:601).
Lefebvre insists on a relational appreciation of space as actively produced in and through everyday practices that are simultaneously material and metaphorical. Smith explains that the *production of space* implies “that social practices and space are internally related in that each entails the other” (Smith, 1991:70). Hart (2002:36) extends this argument by suggesting that the production of space is inseparably tied to its physical production in specific sites such as cities, rural villages or urban towns, in and through situated practices. These situated practices are simultaneously material, symbolic and mediated through power relations in specific sites. Massey (1994) contends that spatiality is constructed out of the multiplicity of social relations across spatial scales, from the global scale, through to the tentacles of national political power, to the social relations within the town or the settlement (Massey, 1994:3). Places such as cities and towns are not to be viewed as bounded enclosures, but rather as a subset of interactions which constitute social space, a local articulation within a wider world. Places are always formed through relations with wider arenas and other places. According to Fataar (2007:601), the social construction of space refers to the production of material and symbolic practices in localised contexts, themselves produced within wider circuits of global, national and local scales. Fataar suggests that space does not simply refer to an empty landscape which architects or builders fill up with built structures. It refers to the relational or human dimension of space, i.e. lived space or as Lefebvre (1991) suggests, the relational appreciation of space as actively produced in and through everyday human practices. Smith explains that the social construction of space implies “that social practices and (physical) space are internally related in that each entails the other” (Smith, 1991:70). Similarly, Fataar argues that space should be understood as the active interaction between the physical environment and the people’s uses of and practices in it (Fataar, 2007:316).

Although there are many spatial theories, I shall be using Lefebvre’s framework of the spatial triad, because it is clear heuristic and transcends the dualistic Cartesian thinking prevalent in many geographical discourses on space which will help me analyse the use of space in schools. For this study, however, I shall be looking specifically at one node of Lefebvre’s dynamic triad, i.e. physical space, and its effect on the practices and uses of the collectively reconstructed physical spaces by teachers, and will also examine, to a lesser extent the use of these reconfigured physical spaces by learners and parents.
3.4 Lefebvre’s spatial triad

For Lefebvre (1991), space is a social product consisting of three elements: i.e. *spatial practice* (the relationship between the physical objects, material space and people), *representations of space* (the codes and symbols in terms of which the space is conceptualised), both of which are embodied in *representational spaces* (the lived experiences of those in the space). These elements are not independent, and it is the interaction between them, which results in the production of space. Lefebvre, argues that space is produced by dynamic interrelationships between representations of space, and practice over time (Lefebvre, 1991:42-52;116).

Lefebvre (1991:38-39) suggests that *representations of space* is a conceptualised space constructed out of symbols, codifications and abstract representations. *Spatial practices*, embrace “production, reproduction and the particular locations and spatial sets characteristic of each social formation” (Lefebvre, 1991:33) and as such “come together with the other two elements of the triad to ensure the levels of cohesion and competence required for the everyday functions of society, the spatial events of life” (Watkins, 2005:210). According to Watkins, the final feature, which completes the triadic model, comprises *representational spaces*, the spaces of lived experience, and a space as directly *lived* through its associated images and symbols, and hence the space of “inhabitants” and “users” (Lefebvre, 1991:39). Space is at once *perceived*, *conceived* and *lived*. None of these dimensions can be posited as the absolute origin, as “theory,” and none is privileged. Space is unfinished, since it is continuously produced, and it is always bound up with time (Lefebvre, 1991).

Lefebvre’s triad was intended to facilitate this engagement; it was not to be simply another abstract model subject to intellectual conjecture, as the triad loses all force if it is treated as an abstract “model”. If the model cannot grasp the concrete, then its import is severely limited, amounting to no more than that of one ideological mediation of among others (Lefebvre, 1991:40). The triad would rather, enable both abstract conceptions and lived experiences to be engaged with as a coherent entity. Merrifield (2000) argues that in Lefebvre’s hands, space becomes re-described not as dead, inert thing or object, but as organic and fluid and alive; it pulses, it palpitates, its flows
and collides with other spaces. And these interpenetrations - many with different - get superimposed upon one another to create a present space (Merrifield, 2000:171).

Lefebvre explained his “conceptual triad” as follows:

**3.4.1 Spatial practice**

*Spatial practice* refers to the “physical” or “perceived” space, which “embraces production and reproduction, and the particular locations and spatial sets characteristic of each social formation” (Lefebvre, 1991:33) and as such comes together with other triadic elements to ensure the levels of cohesion and competence required for the everyday functions of society, the spatial events of life (Watkins, 2005:213). *Spatial practices* are practices that “secrete” society’s space. Lefebvre (1991:38) argues that the spatial practices of any society are revealed by “deciphering” its space. Spatial practices have close affinities to perceived space (Merrifield, 1993:524). In other words, people’s perceptions condition their daily reality with respect to the usage of space: for example, their routes, networks, patterns of interaction that link places set aside for work, play and leisure. Kevin Lynch, in his book *The Image of the City* (1960) highlights the perceptual “imageability” of the urban landscape - monuments, distinctive landmarks, paths, natural boundaries, etc. - simultaneously aids and deters city dwellers’ sense of location and manner in which they act (Lynch, 1960). *Spatial practices* structure daily life and a broader urban reality and, in doing so, ensure societal cohesion, continuity and a specific spatial competence (Lefebvre, 1991:33). Shields (1999) states that “this cohesion through space implies, in connection with social practice and the relating of individuals to that space, a certain level of *spatial competence* and a distinct type of *spatial performance* by individuals” (Shields, 1999:162).

*Perceived space* has a perceivable aspect that can be grasped by the senses. This perception constitutes an integral component of every social practice. It comprises everything that presents itself to the senses; not only seeing but hearing, smelling, touching, tasting. This sensuously perceptible aspect of space directly relates to the materiality of the “elements” that constitute “space” (Schmid, 2005).
3.4.2 Representations of space

Representations of space refers to the “mental” or “conceived space”, which Lefebvre (1991:38-39) suggests is the dominant space in current society and is the “conceptualised space” constructed out of symbols, ceremonies, codifications and abstract representations. These representations are the “logic and forms of knowledge, and the ideological content of codes, theories, and the conceptual depictions of space” (Shields, 1999:163), and are thus “the manifest representation of our mental constructs of the spaces of our rational, abstract understandings” (Watkins, 2005:212). Lefebvre (1991) warns that “the theoretical error is to be content to see a space without conceiving it, without concentrating discrete perceptions by means of a mental act, without assembling details into a hole ‘reality,’ without apprehending contents in terms of their interrelationships within the containing forms” (Lefebvre, 1991:95). Representations of space is the conceived space of professionals and technocrats such as planners, engineers, developers, architects, urbanists, geographers and those of a scientific bent. (Merrifield, 1993:523). It is the dominant space in any society and is tied to the relations of production and to the order which these relations impose, and hence to knowledge, to signs, to codes, and to “frontal” relations (Lefebvre, 1991: 33). Representations of space must therefore have a substantial role and a specific influence in the production of space. (Lefebvre, 1991:42). Conceived space cannot be perceived as such without having been conceived in thought previously. Bringing together the elements to form a whole as intended in Lefebvre’s theory of the production of space indicates that what he considered or denoted as space presumes an act of thought that is linked to the production of knowledge (Schmid, 2005).

3.4.3 Representational space

Representational space refers to “social” or “lived space”, which is directly lived space, the space of everyday life. It is space experienced through the complex symbols and images of its “inhabitants” and “users” (Lefebvre 1991:39). These are the lived experiences that emerge as a result of the dialectical relation between spatial practice and representations of space, “embodying complex symbolisms, sometimes coded,
sometimes not" (Lefebvre, 1991: 33). Representational space has no need to obey rules of consistency or cohesiveness because it is, as Lefebvre (1991:42) says, alive:

It speaks. It has an affective kernel or centre: Ego, bed, bedroom, dwelling, house; or: square, church, graveyard. It embraces the loci of passion, of action and of lived situations, and thus immediately implies time. Consequently it may be qualified in various ways: it may be directional, situational or relational, because it is essentially qualitative, fluid and dynamic.

Watkins (2005) argues that it is the representational spaces that form, inform and facilitate the deviations, diversity and individuality that are a fundamental aspect of any social encounter. (Watkins, 2005:213). Lefebvre argues that social space is inextricably linked to mental space (as defined by philosophers and mathematicians) and physical space (as defined by practio-sensory activity and the perception of “nature”) (Lefebvre, 1991:27). All three aspects – physical, mental and social - refer back to, reinforce and hide the other (Lefebvre, 1991:27-29). Lefebvre, states that:

… A social space is not a socialized space… Social space can never escape its basic duality, even though triadic determining factors may sometimes override and incorporate its binary or dual nature, for the way in which it presents itself and the way in which it is represented are different (Lefebvre, 1991:190-191).

It is important to note, however, that while the interaction of these three elements produces space, they are also produced in space - Lefebvre notes that space is a product of and a precondition for social processes: “space is at once result and cause, product and producer” (Lefebvre, 1991:142). This added dimension means that space itself is not a neutral container but plays a role in shaping the social processes that determine representations of space, spatial practice, and representational space (Lefebvre, 1991). The core of the theory of the production of space identifies three moments of production: first, material production; second, the production of knowledge; and, third, the production of meaning. This makes it clear that the subject of Lefebvre’s theory is not space in itself, not even the ordering of (material) objects and artefacts in space. Space is to be understood in an active sense as an intricate web of relationships that is continuously produced and reproduced. (Lefebvre, 1991).
Merrifield (1993:524) suggests that the relations between perceived-conceived-lived moments are never stable and exhibit historically defined qualities, attributes and interconnections. But the problem under capitalism is, according to Lefebvre (1991), that primacy is given to the conceived: all which renders insignificant the “unconscious” level of lived experience (Lefebvre, 1991:34). Lefebvre believes that spatial practice and social practice are interconnected at whatever scale; and a spatial practice has the capacity to destroy social practice (Lefebvre, 1991:366). He argues, furthermore, that those spaces most effectively appropriated are those occupied by symbols: spatial practices are profoundly affected by the perceived, symbolic landscape.

The symbolic meaning according to Merrifield (1993) for example, of parks and gardens (that emphasise an absolute nature), religious buildings (that symbolise absolute wisdom, reverence and power) and monuments (charged with psychological power, representing desires, past events and battles waged or to come etc.) are legion. The landscape is thus impregnated with symbols and imagery that have an explicit and insidious impact on spatial practices of everyday life. To this end for Lefebvre, the symbolic landscape is fertile with myths and legends, and hence remains a formidable means of appropriating space (Merrifield, 1993:526). Learners and teachers are in other words products of the school space, but are at the same time occupiers and producers of those specific spaces.

3.5 The value of good design

Space does not exist “in itself”; it is produced (Lefebvre, 1991). In this next section I consider how human action has produced spaces in specifically healthcare and education sectors. Research done by the Bartlett School of Planning in London (CABE, 2002), the school of Architecture at the University of Sheffield (BDR, 2010), and researchers at the Royal Institute of British Architects (RIBA, 2011) have found that spatial design does make a difference. They argue, for example, that a well-designed hospital will help the patients get better more quickly; a well-designed school will improve the educational achievements of its learners; a well-designed department store will have a direct impact on its sales, and a well-designed neighbourhood will benefit from lower crime and higher house values.
Professor Mark Schneider, professor of political science at New York State University, argues that design alone cannot raise achievements, but poor design can be an obstacle to raising educational standards to a certain level (CABE, 2010:8). With this research in mind, that school facilities do affect learning in the lived spaces. This thesis will briefly refer to the value and effect that well-constructed buildings or facilities in general have on human beings.

Paul Finch, chairman of Commission for Architecture and the Built Environment (CABE), stresses in the introduction to an article entitled “Creating excellent primary schools: A guide for clients”, that good school design matters (CABE, 2010:5). He says that good school design affects education and thus life chances of young people. Research done CABE and others show a clear link between well-designed schools and pupil performance and behaviour. They have found that good design alone does not raise standards, but bad design impacts on the quality of teaching, the aspirations and self-perceptions of learners, and the sustainability of a school (CABE, 2010).

Although CABE may be seen as an organization that would fit into Lefebvre’s category of conceived space and normative plans, it shows sensitivity regarding (1) how good design is inclusive and fosters flexibility and creativity and (2) how good design evokes positive affective responses from its users. It recognises that space is a locus of relationships.

3.5.1 The value of design in healthcare

A study done by Sheffield University for NHS, compared patient outcomes in a newly refurbished orthopaedic unit at Poole hospital with those in a 1960’s designed and built conventional ward. The study found that patients undergoing the same medical procedure but treated in two different spaces such as on the newly refurbished ward required less analgesic medication than those on the older ward. Patients not undergoing operations were discharged significantly more quickly from the newer ward - after 6.4 days compared with 8.1 days in the older ward (CABE, 2002:5).

Another study carried out by the University of Nottingham which compared three healthcare environments before and after they were redesigned found clear benefits to
patient health and associated improvements in the efficiency of medical resourcing due to good design. The schemes included a cardiology ward with improved lighting, better external views and clustering of beds in smaller groups; a waiting area with enhanced artificial lighting, better and comfortable seating and interior design; and a coronary day-care unit with better beds and patient facilities, larger windows and a welcoming visitors’ area. The new ward was perceived by patients and staff as more pleasant, relaxing and welcoming. It resulted in lower pulse rates and blood pressure readings amongst patients, shorter post-operative stays - 8 days down from 11 days - and lower prescribed drug intakes (CABE, 2002:5). Lefebvre (1991) would support this research, because he has argued that people’s perceptions condition their daily reality with respect to the use of space.

3.5.2 The value of design in educational environments

A study carried out in 2000 by PriceWaterhouseCoopers for the British Department of Education and Skills (CABE, 2002), examined the relationship between capital investment in schools and learner performance. It found that capital investment in the construction of spaces such as school buildings had the strongest influence on teacher morale and motivation (through the boost to morale which teachers get from working in an appropriate and high quality physical environment), learner motivation (through the visible signs that their education is valued by teaching staff, and society in general) and learner achievement (PriceWaterhouseCoopers, 2001).

Another study carried out at the Georgetown University in Washington DC showed that after controlling other variables, such as student's economic status, students' standardised achievement scores rose by 5.5% as a school’s physical environment improved from one design category to the next, e.g. from “poor” to “fair.” If a school improved its condition from “poor” to “excellent” an average increase of 10.9% was achieved (CABE, 2002:7). A study of Academic Proficiency test results in small rural high schools in Virginia, USA indicated a positive relationship between building condition and student achievement. Results were higher in school buildings with better structural and aesthetic qualities. The combined scores were 5% higher for students in better designed schools. A separate study carried out in California analysed the test
score results of 21000 student records from three school districts in the USA. Controlling for other variables, it found that students with the most natural day lighting in their classrooms progressed 20% faster on mathematics tests and 26% on reading tests in one year than those with the least natural light (CABE, 2002:7).

These are just a couple of examples of how well-constructed spaces can impact on the well-being of a human being and how the utilisation of effective spaces at school can improve learner achievement, motivation, and behaviour etc. Producing \textit{lived} spaces at a school gives the school its own identity and provides an environment that gives every learner the best chance and every educator a work environment that would help them in improving their well-being and results. Furthermore, this thesis will briefly define the needs of the 21$^{\text{st}}$ century learners and then move on to define the different spaces in a school, in which such a learner would need to operate.

The learners of today have attitudes, expectations, and constraints that differ from those learners and students as little as 10 years ago. Learning spaces frequently reflect the people and learning approach of the times, so spaces designed e.g. in 1952 are not likely to fit perfectly with students in 2012. Today’s learners favour active, participatory, experiential learning, the learning style they exhibit in their personal lives (Oblinger, 2006). Their behaviour may be impeded and not match their self-expressed learning preferences when sitting in a large class with chairs bolted to the floor in a conceived space.

Learners of today are highly social, connecting with friends, family, learners from other schools, and teachers face-to-face and online in the lived space. They do not fear technology, because they have been brought up in a technology rich spatial environment and can access the latest information, anywhere and anytime by means of Facebook, e-tablets, mobile phones, digital cameras, MP3 players etc. The shift in methodology from teaching to learning as well as the ever rising educational and technological needs of today’s learners should be considered by the designers of learning spaces. These should be designed in such a manner that the spaces pull learners together in a lived space and that the physical environment promotes rather than constrains learning in a \textit{social} space (Oblinger, 2006). In accordance with Lefebvre’s (1991) school of thought, we have come to the understanding that design is
a process not a product, involving all stakeholders, and should particularly involve the learners when a learning space is being considered or is being designed (Oblinger, 2006).

3.6 What is a learning space?

The emergence of the constructivist learning paradigm has led to a focus on learning rather than on teaching in what Lefebvre would call a *lived space*. It allows educationalists to re-evaluate classrooms and to consider informal learning spaces as loci for learning as well. When referring to teaching and learning in education, people are nowadays using the term *learning space* more and more. As recently as a decade ago, classrooms were the primary locus for learning in education. Other spaces included the library, the computer room, and for the Foundation Phase learners, possibly the sandpit in their section of the school. Classrooms were by far the single most important space for learning (Brown, 2005). A holistic view of learning presents challenges, however. First, the demands on learner time and attention continue to grow. Second, learning doesn’t just happen in classrooms; learning also occurs outside the classroom in outdoor learning spaces as well (Brown, 2005). According to Strange and Banning (2002), *space impacts teaching and learning*, whether that space is explicitly considered or not.

New strategies for enabling learning and accommodating the multiple demands on learner time have led to rethinking the use, design, and location of learning spaces. The emphasis on learning means that school leaders and educators should rethink the learning process that has an influence on the learner. Learning spaces are not mere containers for a few, approved activities; instead, they provide learning environments for people (Brown, 2005:9.1). School leaders should be aware of Lefebvre’s (1991) reference to the appropriation and re-appropriation of spaces. The challenge for schools is to appropriate *dead spaces* i.e. an *ineffective* storage room, an open quad between classes, a quiet shady area under a clump of trees on the school grounds etc., and transform them into productive outdoor learning spaces that would benefit the learners’ learning approach and experience. Brown (2005) defines learning spaces as spaces that encompass the full range of places in which learning occurs, from real to virtual, from classroom to chat room etc. (Brown, 2005:12.4).
3.7 Lefebvre’s triad applied to school spaces

3.7.1 Physical Space

The spaces of a school entail: the actual formal layout of the school’s buildings, classrooms, school grounds, staffroom, office space, and the physical resources in space: furniture, lighting, ventilation etc. Architecture and different building designs create different spatial experiences for the users thereof. A person’s behavior and feelings could change, for example when entering the physical space that a church or library presents, compared to that of a theme park or school bazaar. School principals should be aware of how spatial configurations influence the thinking, behaviour and conduct of the users thereof, and be mindful of constructing learning spaces which could support effective learning, teaching and the maintenance of good discipline and morale.

The MORI/CABE (2002) research is supported by the findings done by the Scottish Funding Council (Marmot Associates, 2006), in which they state that the physical layout of learning spaces should change, because approaches to learning in educational settings are changing. They argue that this should be done because the traditional teacher centred models, where good teaching is conceptualised as the passing on of sound academic, practical, or vocational knowledge, are being replaced with student-centred approaches which emphasize the construction of knowledge through collaboration, in an appropriately constructed learning space. Barr and Tagg (1995) suggest that this shift from an “instructional paradigm” to a “learning paradigm” has changed the role of an educational institution from a place of instruction to a place that produces learning and new knowledge (Marmot Associates, 2006).

3.7.2 Mental space (representations of space)

School space is often conceived by the users of a school establishment as a sort of constraint, a restricting living and working environment, in which material and activities are arranged (classrooms, corridors, boarding school, administration, and sport etc.) according to the pre-established ideas of the institution, and where it is up to each person to find his or her place. However, space is also the means by which the
appropriation of things become possible (Lefebvre, 1991), a means which is available to each user of space to organize the way in which he lives and works at very different levels, of course, depending on his status, his function, and his power (Bourdieu, 1997). Space should thus be seen as a resource, which is allocated to an activity or to people, which people can share, manage, modify, renovate, convert and decorate. It is also a tremendous lever for citizenship education since the school is a social place, which establishes citizenship by making young people and adults live together on the basis of common rules and understanding. Illustrating this very point, Lefebvre asks the question: “Can space occupied by a social group … be treated as a message?” (Lefebvre, 1991:131). The message is found in the physical layout of the school, its playgrounds, passages, classrooms, assembly points, school hall etc., which allows them to feel and think about the overall organization of the school as an educational unit, with rules, roles, tensions, contradictions and also in its entirety, in the present and in the future. Educators and learners use the various physical spaces at schools in order to interact socially, share knowledge and gain knowledge. For example, by renovating a school’s foyer, adding symbols such as flags, cups and logo’s to create an inviting feeling for those entering, expresses a specific message pertaining to the vision and ethos of the school. In organizing and decorating a classroom space in such a manner that the user experiences a feeling of orderliness and academic excellence, does not just change the behavior of those entering it, but also gets people to think and act accordingly.

3.7.3 Social space (Representational spaces)

Lefebvre states that lived school space is multi-dimensional and that it cannot be considered without awareness of its relation to the “conceived spaces” and the “perceived spaces” (Lefebvre, 1991). Lived space is that space that is directly lived through its association with ideals, images, aesthetics, theory, visions and symbols, which become part of the school’s ethos and traditions. The lived space is a social space, which is alive and speaks to the users of that space in time (Lefebvre, 1991).

The philosopher Susanne Langer reminds us that “symbol and meaning make man’s world, far more than sensation” (Langer, 1957:28). It is in and through symbols that we engage in this world, live our lives and find meaning. By our very nature we thrive on
the construction of meaning (Langer, 1957). Geertz (1973), however, argues that we are suspended in webs of significance that we have spun for ourselves – webs that provide the values, norms and ways of knowing that make us part of a particular culture and space (Geertz, 1973), or it could be said, by constructing meaning at a particular school by effectively producing and engaging in the school’s perceived, conceived and lived spaces.

3.8 Conclusion

This chapter has highlighted that design and the construction of space matters because our lives are connected through our common built environment. The descriptions of educational spaces are suggestive rather than prescriptive, and are complex, containing a multitude of variables and relationships. One of the key variables is the institution itself. Educational spaces are institutional in scope - their implementation involves the institution's culture, tradition, symbols, vision and mission. These institutional factors as well as the relationships between the users of the space must be taken into account in order to understand how educational spaces are co-constructed, and how the conceived, perceived and lived spaces within a school influence one another, as well as the institution itself and its users.
CHAPTER 4

TEACHER MOTIVATION

4.1 Introduction

Since my study will probe the notion and the production of the perceived, conceived and lived educational spaces at a school, and linking them to teacher motivation, I shall first briefly look at theories on motivation.

Motivation is probably the most important factor that teachers can target in order to improve learning. Numerous cross-disciplinary theories have been proposed to explain motivation. While each of these theories has some truth, no single theory seems to adequately explain all human motivation.

Motivation has probably been one of the most often-researched subjects in the fields of psychology and education. It stems from the Latin word movere, which means to move or to carry. Therefore, it is only natural to define motivation as a force, one that makes us constantly move, act or do things. According to Arnold, Robertson and Cooper (1993) the word motivation itself gives us a further clue. To use a mechanical analogy, the motive force gets a machine started and keeps it going. In legal terms, a motive is a person’s reason for doing something. Arnold et al. (1993) are of the opinion that motivation concerns factors which push or pull us to behave in certain ways and are made up of three components that are (1) direction, (2) intensity and (2) persistence of work behaviour. They are of the opinion that the most effective approach to motivation is goal setting and feedback (Arnold, et al., 1993:187).

The psychologist Rogers (1962), however, claimed that motivation arises from some need to achieve better standards. While Freud (1966) believed that human behaviour is made up of inner forces that reflect physical energy, Skinner (1968) believed that motivation is a result of outer forces, called stimuli, that move humans. Atkinson and Raynor (1978), however, asserted that motivation is some kind of force that prevents people from losing or falling into failure. Maslow (1954) theorised that motivation is some kind of force triggered by eight needs that he identified. McClelland (1985)
claimed that motivation is related to success. And Campbell, Dunnette, Lawler and Weick (1970) define motivation as the extent to which persistent effort is directed towards a goal (Campbell, Dunette, Lawler and Weick, 1970). Given these various interpretations it is clear that motivation is both complex and central to human behaviour.

4.2 Teacher motivation

According to Rainey (2001), work motivation refers to the level of excitement, direction, and persistence of effort in work settings that drives a person to work hard and well as to achieve a goal. Similarly, Dessler (1980) pointed out that:

…at the same time motivation is both one of the simplest and most complex jobs of management. It is simple because people are motivated by rewards. Therefore if you want to motivate someone you must find out what he or she wants and put that thing as a reward (Dessler, 1980:178).

Finding what teachers and learners want and then aligning each individual’s wants with organizational needs can, however, be complex. In recent years, researchers have been paying more attention to the issue of teacher motivation and the role that effective school leadership plays in enhancing motivation (Bogler, 2002; Dörnyei, 2001). Since the study of Herzberg et al. (1968), many theories have been proposed. Among these are Hill’s (1987), who adapted Herzberg’s two-factor theory to test its ability to explain job satisfaction. He proposes that teachers’ job satisfaction, and hence motivation, should come from those factors intrinsic to the work, namely teaching, scholarly achievements, creativity and the nature of the work itself.

In a study conducted by Pastor (1982), it was found that the teachers with the highest order needs were the least satisfied, presumably because their needs were not being met at school. The researchers point out that the schools studied were better at fulfilling lower order needs than higher order needs. They conclude that high internal motivation, work satisfaction, and high quality performance depend on three critical psychological states: experienced meaningfulness, responsibility for outcomes, and knowledge of results.
Sergiovanni (as cited in Pastor, 1982) found that teachers obtain their greatest satisfaction through the sense of *achievement* in reaching and affecting students, experiencing recognition and feeling responsible for what they do. Adams et al. (2002) highlighted in their study that *learner* achievement can be a factor of motivation for teachers, i.e. if learners are hardworking, talented and high achievers, teachers will be more motivated and a strong relationship between teacher satisfaction and learner achievement is likely to develop. However, the principal’s efforts to motivate and invigorate estranged teachers and to build relationships among otherwise disengaged teachers can have a profound effect on the overall climate of the school. As Michael Fullan points out, well-established relationships are the resource that keeps on giving (Fullan, 2002:18). Although my study will focus on the school’s leaders, it will link teacher and learner interaction in the negotiation and re-appropriation of space, including physical and social spaces.

Research done by Hall and Sundberg (1987) holds that *autonomy* is an imperative factor in teachers’ motivation. They further conclude that teachers, when given due authority or autonomy while designing their courses, class management and evaluation mechanisms, feel more confident and start regarding themselves as *self-initiators*, in contrast to those who are always instructed for the said tasks. The same claim is advanced by Bolin (1989) and Dee et al. (2003) who found that teachers’ empowerment consists of having academic freedom, i.e. investing teachers with the right to participate in decision making, the determination of school goals and policies and to exercise professional judgment about what and how to teach. My study highlighted that these factors are also qualities of transformational leaders who create structures through which teachers can truly be part of decision making and are encouraged to help the establish school goals and vision. Moreover, Short (1993) found that teachers’ empowerment is a process in which teachers develop the capability to grow and to resolve their problems. She explains that she has found that (1) decision making, (2) professional growth, (3) status, (4) self-efficacy, (5) autonomy and (6) impact are the six dimensions of teacher empowerment, and hence of teacher motivation, emerging from her research (Short, 1993).

Sergiovanni (1996) supports the idea that educational leaders should provide professional learning and growth opportunities in order to motivate teachers and to
enhance their performance. Wright (1985) asserted that teachers’ motivation is closely related to recognition, praise, or even occasions when they receive constructive feedback in order to correct their flaws. Open feedback and appreciation not only compels teachers to perform better but also allow the organization to grow in a collective manner. According to Gudridge (1980) great teachers, after all, are not motivated by money but by needs for self-satisfaction and occasional praise from superiors or colleagues.

4.3 Physical spaces, teacher motivation, and teacher well-being.

Mark Haysom, Chief Executive of the Learning and Skills Council (LSC) says that he believes passionately that when you walk through the door of a place of learning, you should feel proud, uplifted, and motivated (HEFCE, 2006). Les Watson, Vice-Chancellor of the Glasgow Caledonian University, however, was quoted as having said: "We spend a lot of time trying to change or motivate people. The thing to do is to change the environment and people will change themselves" (HEFCE, 2006, my emphasis). In this section of my study, I shall be looking at how changes to the physical spaces at schools influence teacher motivation and teachers’ sense of well-being.

According to Snow (2002), the quality of the physical environment at schools affects the performance and motivation of learners as well as teachers. A study of working conditions in 31 urban schools concluded physical conditions have direct positive or negative effects on teacher morale, sense of personal safety, feelings of effectiveness in the classroom, and on the general learning environment. In dilapidated school buildings teachers felt despair and frustration while teachers in renovated buildings voiced a renewed sense of hope, of commitment, enhanced motivation, and a belief that the school and district cared about them and what went on in that physical space (Corcoran et al., 1988).

Lippman (2007) argues that physical spaces are themselves agents for change, and that changed spaces will change practice and influence behavior Lipmann argues that if the physical learning space at schools are well designed and support teaching and
learning practices, teachers’ basic needs of why they were drawn into teaching are met and their motivational levels increase (Lipmann, 2007).

According to Kritchevsky and Prescott (1977), physical space communicates with people – in a very real sense it tells us how to act and how not to act. What it tells us to do is related to what is in the space and how these things are arranged or organized (Kritchevsky and Prescott, 1977). The impact of physical space on teachers is much more complex than simply as an agent contributing towards improving teacher morale. Based on his observations and on Maslow’s theory of basic human needs, Steele (1973) identified six dimensions that represent the various functions of physical settings: (1) security and shelter; (2) social contact; (3) symbolic identification; (4) task instrumentality; (5) pleasure; and (6) growth.

As was mentioned in chapter 3 of this study, well-designed physical spaces have a motivational effect on the users thereof. It was mentioned that learning spaces infused with natural light and good ventilation, for example, provide an environment that is easy and pleasurable to work in. In short the design of our learning spaces should become a physical representation of the institution’s vision and strategy for learning – responsive, inclusive, and supportive of attainment by all. I am of the opinion that a school building - the physical space - should create and radiate a sense of excitement about learning and welcome all users to that space.

It is important for this study that we pause for the moment and reflect on what has been said so far and that well-constructed physical spaces have a positive and motivational effect on the users thereof. A question that arises is what causes the brain to perceive and conceive a physical space in such a manner that it motivates and uplifts a person? As mentioned in chapter 3 and argued by Larken et al. (2010), the environment can influence how participants interact and also shape how they feel about an experience. The school leaders should designed physical spaces in such a way as to promote the development of positive relationships among people and to enhance their levels of motivation. But how? That is the question my study will address.
Carter (1998) and Wolfe (2001), did research on how elements of environmental design combined with brain research principles can be brought together in scientifically understanding how to produce physical spaces that are perceived as safe, welcoming and that can that stimulate positive human interaction. Larkin (2010) argues that by having a basic understanding of the brain’s functions leads to better understanding of how environmental design may support or hinder an individual’s perceived comfort level and mental engagement in any given situation (Larkin, et al., 2010:165). Neuroscience research done by Carter (1998) and Wolfe (2001) has demonstrated how important positive stimulation (novelty or challenge without stress) is to the brain’s functioning throughout life. When the senses pick up a perceived threat, our brains involuntarily start increasing hormones and initiate the body’s fight-or-flight response. The opposite happens when the brain perceives a physical space in a positive light. (Fozard, Schieber, Gordon-Salant, & Weiffenbach, 1993; Purple Cherry, 2009). As this is a mini-thesis, I shall not be able to elaborate further on this important aspect of why and how the brain reacts as it does when perceiving physical spaces.

School leaders therefore need to create spaces for positive interactions that elicit memorable experiences for both teachers and learners because it is critical to their well-being. It is also vitally important that teachers and learners are able to have a sense of privacy, to relax and be themselves within a school environment. In chapter 6 I shall highlight how the three transformational school leaders have paid exceptional attention to creating safe emotional spaces at their schools where both teachers and learners can retire and become energised for the next step at the school. These spaces do not just simply happen, they are produced and re-appropriated by the transformational school leaders, and are used to improve the mood and motivation of teachers, learners and parents alike.

4.4 Conclusion

The research I have done for this thesis has highlighted certain aspects that could lead to the demotivation of teachers. They are: the general lack of safety and security in schools, too many learners in a class, the classrooms being too hot or too cold throughout the year, schools being run down and having too many uninviting physical
and social spaces, and the lives of teachers and learners being threatened or made unpleasant by unruly and ill-disciplined elements.

To be motivated, teachers require that their primary needs are satisfied at their workplace. Their basic needs are for a clean and safe learning space in which they can engage daily with well-mannered, motivated learners who reward them with good results. They also require that their schools provide them with clear guidelines, SMT mentorship as well as the necessary teaching support and LTSM, to do their work effectively. The principal on the other hand should act as a mentor and produce safe, perceived, conceived and lived learning spaces at the school. Once these basic needs are met, their higher order needs for recognition, praise, professional development, involvement in decision making processes, constructive feedback and career opportunities, should be effectively addressed by the school principal, SMT and SGB Members.

My study will start from the assumption that learner achievement is linked to teacher empowerment and teacher motivation. What that link specifically is, will not be the focus of my thesis; instead, I shall examine some ways in which teacher motivation (and by implication, learner achievement) can be strengthened through spatial organization. I hope to show that by making the relevant spaces in schools more inviting and supportive, school leaders can encourage teacher motivation.
CHAPTER 5

RESEARCH METHODOLOGY

5.1 Introduction

The world that social theorists seek to understand is not just empirical, and constituted of facts and propositions; it is also the world of phenomenological experience, reflective judgment, and practical action. Recognising such reality makes more difficult, but perhaps more interesting, the key challenge that theorists have faced ever since Hume: to develop systematic ways of understanding the world that are true to that world as the object of experience and action as well as of observation, that recognise the place of other subjects in that world, and that are rigorous, yet that recognise their own embeddedness in history.

By aiming to interpret the lived experiences of school leaders and the meanings they give to their representational spaces (i.e. their lived experiences that emerge from the dialectic between “spatial practice” and “representations of space”), I will draw on a qualitative pragmatist framework to analyse their lived experiences, as well to offer insights into how spaces can be changed and re-appropriated.

I decided on a pragmatist foundation, because I realised that my study is positioned in between the interpretivist and critical theory; it aims to interpret and also to change things in the "real world". The reason why my study is not strictly interpretivist is because, although I am addressing how principals interpret their space, it is also a matter of how they as transformational school leaders actually changed it. I recognise that my study is not strictly in critical theory either, because I will not be challenging race, culture, gender power relations and the distortions these have inflicted on our use of space. (That would be a subject that warrants a whole thesis on its own.) This study, however, will have a critical element in that it proposes changing certain spatial conditions. I shall point out the ways of thinking about space that are helpful to the educational project and that will, hopefully, act as a guide to action.
Pragmatism fits in well with my study, because it is the emerging theoretical framework for urban transformation (Hein, 2010). What makes pragmatism powerful is that it bridges the divide between the empirical aspects of the world and the meanings and values that we give to it. It also fits in well with Lefebvre's (1991) view in that we can use it to bridge the “imagined” and the “real”, the same aim as the conceptual triad in Lefebvre’s theory: the physical, mental and lived spaces.

5.2 Methodological framework: Pragmatism

5.2.1 The origins of pragmatism

Pragmatism, the Greek root word of which means “action,” or is understood as “a way of acting”, grew out of a turn-of-the century reaction in American philosophy to Enlightenment conceptions of science, human nature, and social order. It was developed by Charles Peirce (1839-1914), William James (1842-1910) and John Dewey (1859-1952), and generally, it has sought to reconcile incompatibilities between philosophical idealism and realism. In the former, reality is conceived of as existing only in human thought and subjectivity, and is given in the form of perceptions and ideas. In the latter, reality is rooted in an external, objective world to which we have access via our senses and reasoning (Bernstein, 2010). Pragmatism has not been developed as a unified philosophical system. It has, however, existed as a related set of core ideas and guidelines that are expressed as versions of applications of pragmatic thought (Bernstein, 1983; Tashakkori and Teddlie, 2003 and Rorty, 2009). Variation within that thought ranges across the realism-idealism continuum and is largely a function of different analytical agendas. Because of that variation, pragmatism has become quite broad in its application to theoretical and research problems. The variation within pragmatism hinges largely on individual affinities for idealism and realism: James tended towards idealism, Peirce towards realism, and Dewey towards a transactional midpoint between the two. Furthermore, there is variation in pragmatism’s influence in the social sciences and humanities. Dewey has been influential in education and communication, Peirce in semiotics, and James in psychology. Pragmatism has been acknowledged as possibly the most distinctive and profound contribution of American intellectual thought to the modern world, and its influence can be found in all contemporary disciplines in the human and social
sciences (Tashakkori and Teddlie, 2003). Usage of the words “pragmatism” and “pragmatic” originate from Peirce and denote the idea of “real world experiences” as the foundation of our understanding, in contrast to the idea of given natural laws (Østman, 2005:87).

In the early days, pragmatism as a concept was disputed and different authors tried to define it in their own precise ways. They wove together strands of scientific method, evolutionary theory, language, and behaviourism into a radically new perspective. According to Richard Bernstein (2010), pragmatism begins with a radical critique of what Pierce called “the spirit of Cartesianism” (Bernstein, 2010: preface). Bernstein argued that pragmatic thinkers sought to develop a comprehensive alternative to Cartesianism - a non-foundational self-corrective conception of human inquiry based upon an understanding of how human agents are formed by, and actively participate in, shaping normative social practices. And they showed the critical role that philosophy can play in guiding our conduct, enriching our everyday experience, and furthering “creative democracy” (Bernstein, 2011:x). The pragmatists’ sharp critique of Cartesianism is also characteristic of two of the most influential philosophers of the 20th century: Wittgenstein and Heidegger. Neither of them had any serious knowledge of American pragmatism, but in very different ways they were responding to the same deficiencies of modern philosophy that had provoked the pragmatists. Bernstein remarks that it is striking how they (and others influenced by them) came to share many of the same insights of the pragmatists in what Heidegger calls our “being in the world” and Wittgenstein’s calls “forms of life (Bernstein, 2011:x).

Today, pragmatism covers a broad field of philosophy, based on the idea of a naturalist and empiricist origin of knowledge, combined with a devotion to social development and often including an ethical insistence. Pragmatism began as a distinctive American philosophical movement, but it has a global reach. This is evident in the influence of pragmatism on post-Second World War German philosophy. Apel, Habermas, Welmer, Honneth and Joas have all appropriated and contributed to the development of pragmatic themes. Bernstein (2010) is of the opinion that there are today more and more people all over the world who have come to appreciate the contributions of the classical American pragmatists. He argues that philosophers from both sides of the “Anglo-American analytic / Continental split” are discovering how
much they can learn from styles of thinking that initially seemed so alien to them (Bernstein, 2010:x).

Pragmatism generally lost ground to analytical philosophy in the mid-20th century. The pragmatists did not constitute a homogeneous group or school of philosophers, or even a consistent succession of ideas, but rather a loosely knit web of American philosophers sharing the idea of thinking being closely related to action. Human action is the source of reflection, which can be developed into a conceptual understanding constituting the framework for a trustworthy understanding of the world (Rorty, 2009).

As I noted in my Introduction, according to Bernstein (2010) Charles Sanders Peirce (1839-1914) is generally credited as the originator of the term pragmatism and the formulation of some of its basic tenets. One of his earliest statements (1877) pertained to methods for resolving doubt about conclusions, in which he argued in favour of science because of its flexibility and self-correcting processes. This view contrasts sharply with the Cartesian basis of knowledge in subjectivism and individualism proposed by Descartes. Rather than focusing on belief and consciousness as definitive, Peirce focused on probability. Both truth and scientific rationality rest in a community of opinion in the form of perpetual doubt and through a process of revisions towards the clarification of ideas. The emphasis in this process is both evolutionary, since Peirce saw modes of representing knowledge moving from chance (firstness) to brute existence (secondness) to generality or order (thirdness), and pragmatic, since truth is meaningful only in terms of future consequences for human conduct (“the pragmatic rule”). Peirce’s pragmatic rule states that the meaning of anything resides in experiential consequences. Accordingly, the distinction between subject and object as fundamental was denied and was replaced with the idea that relations between the knower and the known are produced by and in on-going experience. This more dialectical conceptualization informed his theory of emotions, which stressed bodily responses as producers of emotional responses (e.g., we feel afraid because we tremble) and his theory of the self, emphasising the “I” (self as knower) and the “Me” (self as known) as tied to multiple networks of group affiliation. His focus throughout was on the operations of ongoing experience, and his formulations not only specified and elaborated pragmatist principles but anticipated or contributed to behaviourism, gestalt psychology, and operationalism.
According to Rorty (1982), William James (1842-1910) was driven by the problem of determinism and free will. This problem was expressed in his monumental *Principles of Psychology* (1890), in which he established a functional view assimilating biology and psychology and treated intelligence as an instrument of human survival. His pragmatic theory of truth was a synthesis of a correspondence theory of truth and a coherence theory of truth, with an added dimension: truth is verifiable to the extent that thoughts and statements correspond with actual things, as well as the extent to which they "hang together," or cohere, as pieces of a puzzle might fit together; and these are in turn verified by the observed results of the application of an idea to actual practice.

According to Granger (2006), John Dewey (1859-1952) was perhaps the most influential and productive of the early pragmatists. Coming philosophically to pragmatism from Hegelianism, he emphasised intelligence, process, and the notion that organisms are constantly reconstructing their environments as they are being determined by them. He contributed forcefully to the critique of dualistic thought in his analysis of stimulus response theory (1896). Instead of constituting an arc, in which the stimulus leads to a response (a dualistic conception), Dewey argued that they are merely moments in an overall division of labour in a reciprocal, mutually constitutive process (a dialectical conception).

The Peircean emphasis on “meaning residing in experiential consequences”, James’s point that the value of theory resides in its usefulness, and the Deweyan view that theories are instruments for addressing problematic situations, make pragmatism a useful framework for my study with its aim to reconfigure school spaces into useful, productive educational spaces.

### 5.2.2 Principles of pragmatism

Pragmatists do not vote en bloc. There is no such thing as the *pragmatist party-line*. However, there are some key ideas that characterise the pragmatist stance. In summary, the main ideas embodying the thrust of pragmatism are the following (Tashakkori and Teddlie, 2003; Rorty, 2009 and Bernstein, 2010):
1. Humans are active, creative organisms, empowered with agency rather than passive responders to stimuli.

2. Human life is a dialectical process of continuity and discontinuity and therefore inherently emergent.

3. Humans shape their worlds and thus actively produce the conditions of freedom and constraints.

4. Subjectivity is not prior to social conduct, but instead flows from it. Minds (intelligence) and selves (consciousness) are emergent from action and exist dialectically as social and physical processes rather than only as psychic states.

5. Intelligence and consciousness are potential solutions to practical problems of human survival and quality of life.

6. Science is a form of adjustive intelligibility and action that is useful in guiding society.

7. Truth and value reside simultaneously in group perspectives and human consequences of action.

8. Human nature and society exist in and are sustained by symbolic communication and language.

In these core ideas can be seen the neo-Hegelian focus on dialectical processes and the concurrent rejection of Cartesian dualism, the Darwinian focus on the emergence of forms and variation through adjustive processes, and behaviouristic focus on actual conduct as the locus of reality and understanding.

5.2.3 Pragmatism: Lefebvre and the new urban transformation approach

In his book *The Production of Space* (1991) Henri Lefebvre deliberates on the problem of a spatial code for reading, interpreting and producing the space we live in. He is not content with the linguistic approach where the notion of meaning is defined purely in terms of language. The semiotic theory of Charles Peirce provides the required elements for a Lefebvrean kind of spatial code. For Peirce meaning is defined as a habit of action, and this notion of meaning can be applied not only to linguistic expressions but also to things like hats and tables, buildings and squares. In other words, meaning is defined as use, use of objects and instruments, our own organic
body included. This wider notion of meaning provides the required semiotics of space (Lefebvre, 1991).

Lefebvre discusses, among other things, the relation between the discourse of space and the actual production of space. The already produced space can be decoded, it can be read, and the question is whether there is a kind of general code of space (Lefebvre, 1991:16-17). He is not content with the so-called priority-of-language thesis but looks for a code which is a part of a practical relationship, a part of “an interaction between subjects and their space and surroundings” (Lefebvre, 1991:18). Määttänen (1993) suggests that the semiotic theory of Charles Peirce is a suitable theory of meaning for analysing urban transformation. This theory, when properly interpreted, helps to see how the formation of spatial meanings and the actual production of space are intertwined aspects of the social process that Lefebvre calls “spatial practice”. Peirce’s semiotic notion of meaning is not confined to language, it is more general. For Peirce, meaning also resides in “experiential consequences”, usefulness and action. Lefebvre (1991:118-119) comments that constructed urban space is:

... a place of encounter, assembly, simultaneity. This form has no specific content, but is a centre of attraction and life. It is an abstraction, but unlike a metaphysical entity, the urban is a concrete abstraction, associated with practice ... Nothing exists without exchange, without union, without proximity, that is, without relationships. The city creates a situation, where different things occur one after another and do not exist separately but according to their differences. In this sense, the city constructs, identifies, and sets free the essence of social relationships.

So according to Lefebvre, constructed spaces - buildings, squares, places and so on - are created and interpreted by different kinds of habits and practices that are related to those places, that are carried on in these places. The pragmatist’s emphasis on action, practical activities, does not entail that linguistic and other symbolic meanings are ignored. Pragmatism doesn’t see a division between language and action, but is concerned, rather, with how language and action are in a reciprocal relationship of influence. Ludwig Wittgenstein’s principle that “meaning is use” is, in effect, an application of this Peircean way of thinking. The principle “meaning is use” can be applied to linguistic expressions as well as to instruments like hammers and shoes - or
to buildings and squares. The outcome is that, when discussing objects like schools, houses and so on, we have different layers of meaning. Symbolic meanings and linguistic expressions have an effect on how we experience the world, but this is not the only level of meaning. Habits of walking, choosing different routes, using different kinds of tools in our daily life are also ways of interpreting and understanding the world around us (Määttänen, 1993).

So, with its emphasis on “meaning is use and use is meaning”, pragmatism links with Lefebvre’s spatial triad of conceived, perceived and lived space in order to make meaning of the (constructed) world we inhabit. For Lefebvre, “a spatial code is not simply a means of reading or interpreting space: rather it is a means of living in that space, of understanding it, and of producing it” (Lefebvre, 1991:47-48, my emphases). The philosophical problem is how to combine living and producing with understanding. Understanding is often limited to conceptual thinking, but “spatial practice is lived directly before it is conceptualized” (Lefebvre, 1991:34). So there is seemingly a gap between practical and conceptual understanding, a potential “gap between the theoretical (epistemological) realm and the practical one” (Lefebvre, 1991:4). However, Lefebvre points out that “signifying processes” (understanding) can occur only in a lived space “which cannot be reduced either to everyday discourse or to a literary language of texts” (Lefebvre, 1991:136). Signifying practices are best analysed with the semiotic triad of understanding-producing-living and it also helps to see that there really is no gap between the two realms of signification, i.e. the practical and the linguistic.

The basic idea of Peirce’s pragmatism was to widen the concept of experience from that of mere sense-experience. The main problem was to find out the epistemological significance of action, to bridge the “gap” between epistemological and practical, to use Lefebvre’s expression. In Peirce’s pragmatism habits of action are also beliefs, even concepts, and this holds for bodily behaviour as well (Rorty, 1982). Most of us have the habit of using the door and not the window when exiting a room. This habit is a structured series of acts and action, and this structure accommodates to the structure of the physical reality. This habit as such is a kind of belief about the structure of the world, it is a belief that if you use the door you can continue walking quite safely but if you use the window something surprising may happen. Habits of this
kind just have to accommodate to real and objective conditions of action, to what Peirce called “hard facts”.

Lefebvre, poses the question, what is the relationship between physical space and social space? As Lefebvre points out, although the physical space is transformed into social space, it remains as a point of departure, as “the background of the picture” (Lefebvre, 1991:191). In Peirce’s terms, the hard facts (our beliefs about physical space) are still with us. Social facts are also objective, but in a different way than hard facts. Social facts may perhaps be called “soft facts”. From the Peircean point of view these soft facts exist as habits of social action, and from an individual’s viewpoint the social practices and habits are perfectly objective (Lefebvre, 1991:191).

Social space is the space of social practice, and social practice is always spatial practice. As cultural and social beings we are still embodied beings which move around in space in our social activities, when we produce and reproduce the social space around us. Lefebvre puts it like this: “Social relations, which are concrete abstractions, have no real existence save in and through space. Their underpinning is spatial” (Lefebvre, 1991:404). And the space of our understanding is the physical space of hard facts transformed into social spaces of soft facts. Just as hard facts are our beliefs about the physical spaces, the habits of action of the soft facts are not only facts but also beliefs. As habits of an individual they are beliefs about social reality, but when one acts according to these habits one participates in constituting the social reality and is, thus, among others in the process of establishing the social reality of soft facts. Soft facts are real in the sense that individuals have to accommodate their behaviour to these facts if they want to get on in a society. But soft facts are not hard facts, i.e. there is a distinction between physical space and social practices, but not a separation.

Social practice is spatial practice of embodied beings that transform the physical space of hard facts when they transform it into social space. The mental is realized in a chain of social activities and so, in the temple, in the city, in monuments and palaces, the imaginary is transformed into the real (Lefebvre, 1991:252). In this sense, then, the social space exists as real by virtue of the physical space of hard facts. But yet there is a difference. Hard facts as buildings, stones, roads and so on can be
perceived, but the social space is not experienced in a way that would fit nicely in with the Cartesian notion of experience, namely the notion according to which experience is sense-experience: “Social relations properly so called - i.e. the relations of production - are not visible in sensory space” (Lefebvre, 1991:211). Peirce is concerned with exactly the same phenomenon: Human agents are formed by, and actively participate in shaping, normative social practices. Beliefs, experience and space are intertwined in relations of meaning.

The interconnection between representations of space and representational spaces can be seen when one notes that experience consists of perception and action, that hard and soft facts are tightly intertwined realms of experience. Since my study focuses on how human agents in schools changed the physical spaces and thereby the educational experiences of its users, a pragmatist framework which focuses on the interplay between space, action and meaning is a useful epistemological tool for my research purposes.

5.3 Qualitative research

According to Halcomb & Davidson (2006:39), qualitative research focuses on the exploration of values, meanings, beliefs, thoughts, experiences and feelings characteristic of the phenomenon under investigation. Babbie and Mouton (2001:270) and Henning, Van Rensburg and Smit (2004:3) describe the primary goal of qualitative research as describing and then understanding (“verstehen”) as opposed to merely explaining social action. Qualitative research can be seen as context specific but the data obtained from such studies may be transferred and applied to related contexts for comparative or other purposes.

Qualitative research shares the theoretical assumptions of the pragmatist paradigm, which is based on the notion that social reality is created and sustained through the subjective experience of people involved in communication (Matveev, 2002). An appropriate definition of a qualitative research method is that of McMillan and Schumacher (2001:57) which states that:
Qualitative research is based on a naturalistic-phenomenological philosophy that views reality as a multi-layered, interactive and shared social experience interpreted by individuals.

In summary, qualitative researchers, according to Smaling (1992:174), cited in Mantlana (2006:123), see:
(a) The object of the study of the world as defined, experienced or constituted by investigating people;
(b) The method of data collection as open, flexible and not strictly regimented and rigid;
(c) The representation of data in a form that is non-numerical;
(d) Data collection and data analysis as a cyclical relation and that one can stop gathering data when new data do not add new information on the research problem;
(e) Qualitative research as an approach that enables researchers to learn first-hand about the social world they are investigating by means of participation in that world through a focus on the individual;
(f) Qualitative research as the study of phenomena in their natural settings and the world as experienced by the individual in “natural language”;
(g) Qualitative research as involving a participant who is being studied to establish a close relationship between the researcher and the participant. This rapport enables the participants to “open up” and talk about things that touch them deeply.

In my study, I see my data collection and analysis in terms of the following aspects, as highlighted by Strauss and Corbin (n.d:9):
(a) The need to get out into the field to discover what is really going on;
(b) The relevance of theory grounded in data, to the development of a discipline as a basis for social action;
(c) The complexity and variability of phenomena and human action;
(d) The belief that persons are actors who take an active role in responding to problematic situation;
(e) The realisation that persons act on the basis of meaning;
(f) The understanding that meaning is defined and redefined through interaction; (g) Sensitivity to evolving and unfolding the nature of events (processes), an awareness of the interrelationships among conditions (structures), action
The reason why I have decided to use qualitative research to gather data for this thesis is because it is applicable due to its strength and because it seeks to understand my research problem of spatial construction from the perspectives of transformational school leaders. Qualitative research is especially effective in obtaining culturally specific information about the values, attitudes, opinions, behaviours, and social contexts of particular populations. As a research method it helped me to understand the leadership style that the school leaders in the study embraced, assisted in interpreting their “natural” leadership style against that of transformational leadership, and enlightened me on how they produced, re-appropriated, and negotiated the perceived, conceived and lived spaces at their school.

In my study, I hope to give context-specific colour to spatial theory, aim to use the sample of three schools as constituting valid educational contexts, use triangulation to strengthen the reliability of my findings, and wish to develop feasible guidelines to action for school leaders to reconfigure their school spaces in innovative ways.

5.4 Research methods

For the empirical research of the thesis, I made use a focus group and observations as methods to gather data on both hard and soft facts. I focused on a qualitative approach, analysing transformational school leaders’ interpretation of their own practices and lived spaces, in addition to observing them in their schools.

5.4.1 Focus groups

In a focus group, information on a particular subject is drawn from a group of people, who share similar characteristics, through the interaction between the moderator and the group, and the interaction among group members (Stewart, Shamdasani and Rook, 2007). A focus group is a qualitative method that involves group interviews in which the focus group leader actively encourages discussion among participants on the topics of interest (Krueger and Casey, 2000). Moreover, the focus group typically
does not constitute a representative sample; instead, it is a group of individuals who have some knowledge pertinent to the topic. The insights gained through focus groups potentially have greater depth than those gained from “one-way” research methods such as questionnaires or surveys, because of the potentially rich interaction between multiple parties (Krueger and Casey, 2000).

The advantages of the focus group method are that: this technique is a socially orientated research method capturing real-life data in a social environment; it allows group members to respond to each other’s inputs, making for a more dynamic interaction than a one-to-one interview; it allows the researcher to explore topics, and to generate hypotheses, and is flexible; it is an economical, fast, and efficient method for obtaining data from multiple participants; it has high face value; it allows the researcher to increase the overall number of participants in a given qualitative study and it is comparatively easier to drive or conduct than other studies (Krueger and Casey, 2000). In addition, the sense of belonging to a group can increase the participants’ sense of cohesiveness (Peters, 1993) and help them to feel safe to share information (Vaughn, Schumm, and Sinagub, 1996). Furthermore, the interactions that occur among the participants can yield important data (Morgan, 1988), can create the possibility for more spontaneous responses (Butler, 1996), and can provide a setting where the participants can discuss personal problems and provide possible solutions (Duggleby, 2005).

On the other hand, the disadvantages of the focus group method are that: it is not based in a natural atmosphere; the interviewer has less control over the data that are generated than in the one-to-one structured interview; analysing the data, can become difficult at times, because the interaction of the group forms a social atmosphere and the comments should be interpreted inside of this context; it demands carefully trained interviewers; it takes some effort to assemble the groups; the discussion must be conducted in a conducive environment, and the focus group approach requires astute observer-facilitators to make the data collecting useful and effective (Krueger, 1994; Morgan, 1997; Krueger and Casey, 2000).

For my study, the focus group method is an appropriate and effective method for investigating my main research question and assisted me in capturing the relevant
data, i.e. their beliefs about the physical spaces in their schools, their actions in making certain spaces more productive, and their experiences and uses of the reconfigured spaces. The three principals who constituted the focus group were selected because they share common characteristics and have the same frame of reference regarding innovative, engaging education, and have positioned their schools in the category of excellence, which has been measured externally by members of the Joint Education Trust (JET), Western Cape Education Department (Provincial) and the Department of Education (National).

I conducted the focus group interview in both Afrikaans and English, the reason being that two of the principals are Afrikaans speaking and the other one English speaking, although all three of them are fluent in both official languages. The interviewees were given the opportunity to respond in the language of their own choice. I asked an additional person to act as triangulator/observer and note-taker during the focus group in order to add to the understandings gleaned from the data received, and using it to give a fuller picture (Rose and Webb, 1997).

Triangulation takes the benefits of data collection methods from different methodological traditions, without too close a scrutiny of the possible conflicts inherent in different paradigms (Kelle 2001). This is empirically attractive for pragmatists, who argue that it can increase the ability to interpret findings (Thurmond 2001). According to Fielding and Fielding (1986), using triangulation gives no “truth” guarantees to research. It combines, but does not eradicate, problems with each method of data collection (Fielding and Fielding 1986). For triangulation in my study, I used a triangulator in the focus group and used follow-up observation to verify the focus group responses.

One other practical arrangement that I had made beforehand in preparing for the focus group, was to make use of a soundproof seminar room situated in the research commons at the University of Stellenbosch. I decided on this specific venue, because it is a comfortable, spacious and neutral space which lends itself towards the holding a focus group meeting. Other benefits were that the venue was relatively central for the three principals, easily accessible and offered secure parking reserved for them, all of which contributed towards honouring them and making it a little bit easier for them to
slot the two hour long focus group engagement into their busy school schedules. Spatial considerations directed my own choices with regards the type and application of research methods.

5.4.2 Observations

Observation is a widely used means of data collection, and according to Cohen, Manion and Morrison (2011), is much more than just looking. It is looking (often systematically) and noting systematically (always) people, events, behaviours, settings, artefacts, symbols, ceremonies, routines and so on (Marshall and Rossman, 1995; Simpson and Tuson, 2003:2). The distinctive feature of observation as a research process is that it offers an investigator the opportunity to gather “live” data from naturally occurring physical and social situations.

Cohen et al. (2011) argue that an observation can be of facts, e.g. the number of books in a classroom, the number of students in a class, the number of learners who visit the school library in a given period, or who sit outside under trees during a break, in a perceived space. It can also focus on events as they happen in a classroom, e.g. the amount of teacher and learner talk; the amount of off-task conversation; the amount of group collaborative work. Further, it can focus on behaviours or qualities, e.g. the friendliness of the teacher; the degree of aggressive behaviour; the type of unsociable behaviour amongst learners in a lived space. According to Cohen et al. (2011:456) one can detect here an assumed continuum from the observation of uncontestable facts to the researcher’s interpretation and judgement of situations, which are then recorded as observations. Or to put it in a pragmatist’s terms, in my study there is a continuum from the hard facts of physical spaces to the soft facts of the social practices that shape and are also shaped by these spaces.

The advantage of observation is that the researcher can look directly at what is taking place in situ rather than relying on second-hand accounts. The use of immediate awareness, or direct cognition, as a principal mode of research thus has the potential to yield more valid or authentic data than would otherwise be the case with mediated or inferential methods. And this is the observation’s unique strength (Cohen, Manion and Morrison, 2011:456). Moyles (2002) extends the method’s strength by contending
that observational data are sensitive to contexts and demonstrate strong ecological validity.

On the other hand, there are also disadvantages associated with using observation as a research method. The lack of control in observing in natural settings may render observation less useful, coupled with difficulties in measurement, problems with small samples, difficulty of gaining access and negotiating entry, and difficulty in maintaining anonymity (Bailey, 1994:245-246). Observation can be a most powerful research tool, but the researcher must be aware that it is not without its difficulties. Also, what counts as “evidence” becomes cloudy in observation, because what we observe depends on when, where and for how long we look, how many observers there are, and how we look. It also depends on what is taken to be evidence of, or a proxy for, an underlying, latent construct. One of the main disadvantages of using the observation method is that it is challenging to analyse the summary of the data obtained. It is also time-consuming, and requires an astute observer to conduct the observation effectively; it is susceptible to observer bias and the hawthorne effect, that is, people usually perform better when they know they are being observed, although indirect observation may decrease this problem; lastly it can be expensive and time-consuming compared to other data collecting methods, and does not increase your understanding of why people behave as they do (Bailey, 1994).

As a pragmatic researcher I took note of the above concerns, and went to observe at the schools how the perceived, conceived and lived spaces were used, and how the users thereof took action in engaging “real world” educational situations. The aim was both to verify the answers the principals had given in the focus group, and to see how the people used the spaces at their schools. Since I could not observe everything, I prepared a template with the key features I wanted to observe and verify as a result of the focus group discussion. Using the template for all three schools allowed me to have a handy table to highlight differences and similarities between the schools.

In summary, for my study the advantages of the observation method are that: I could gather spontaneous quality of data, such as when and where the event of activity was occurring in the school environment; I could pick up subtle nuances in the way that participants “live” their space; the observation verified independently the information
gained from the focus group and thus acted as triangulation and verification of the three principals’ responses given during the focus group meeting; it did not rely on additional people’s willingness or ability to provide information; and it allowed me to directly see what people do rather than relying on what people say they did (Taylor-Powell, and Steele, 1996).

5.4.3 Sample selection

The schools that I used in my research were three schools that have all excelled in the Western Cape Province in South Africa’s external provincial and national examinations. (I used the Systemic Grades 3, 6 and 9 examinations as well as the Grade 12 NSC examination results as a benchmark.) The empirical research focused on the principals of these three schools who constituted the focus group. The reason why I involved only three principals is because of the limits of a mini-thesis. Furthermore, as Deputy Chief Education Specialist, I have seen these three schools when visiting as an invited guest, and know that they have used space innovatively. Although they are in the same education district that I work in, I am as an education official, not responsible for any one of them.

5.5 Ethical considerations

It is important when doing an empirical study to follow the correct ethical procedures. Ethical issues are present in any kind of research. The research process can create tension between the aims of the research to make generalizations for the good of others, and the rights of participants to maintain privacy. Ethics pertains to doing good and avoiding harm. Harm can be prevented or reduced through the application of appropriate ethical principles. Thus, the protection of human subjects or participants in any research study is imperative (Orb, Eisenhauer and Wynaden, 2000:93). I have highlighted the following key ethical principles in order to minimize harm.

5.5.1 Consent
The potential participant must, however, be given the opportunity to give full consideration regarding the decision whether or not to participate in the research study without undue influence from his or her family, or the scientific investigator.

I applied for and received permission from the Western Cape Education Department, and written consent from the three principals at whose schools I had done the observations. Every participant in this research had been asked beforehand to engage in it voluntarily. The participants were given detailed information about the aims and methodology of the research project. This ensured that the three participants’ freely given consent was an informed one. For the observations, I received written consent from the three participants to move freely and unobstructed anywhere in their schools.

5.5.2 Right to withdraw

The participants were informed before the time that they would be given the right to withdraw from the research project without having to give an explanation. In explaining the procedures of the focus group meeting before it started, they were once again reminded that they could still withdraw from the research project at any time, and that I would fully respect their rights to do so. No one withdrew and the focus group meeting commenced.

5.5.3 Privacy and confidentiality

It was explained to the participants that their right to privacy, confidentiality and anonymity would be respected at all times. Neither their institutions nor the participants will be named in this research report. In this thesis, only fictitious names will be used. Only photographs that did not directly identify learners, teachers or the school have been used, whether these be of the school’s name, logo or other easily recognisable structures, buildings or landmarks.

5.5.4 Recording

Tape recordings were used to capture the individuals’ responses during the focus group interviews. Consent was obtained from the three principals to use an audio tape
recorder. No participant expressed any discomfort at all with the audio recording, not even after they had consented. It was explained to them that after the research is completed and assessed for the purpose of this thesis, all recordings will be erased.

5.5.5 Storage and security

All data is organised, stored and access to it managed by myself, and shared with only my supervisor, the triangulator and the person who transcribed the focus group interviews. Once the focus group interviews had been transcribed the notes and removable computer flash-drives were stored safely. The data was stored in such a way that it did not fall into the hands of any unauthorised persons, by protecting it with a password to which only I have access.

5.5.6 Reporting

Once the examiners have assessed the final thesis, copies thereof will be made available to the three school principals who took part in the research programme.
CHAPTER 6

DATA ANALYSIS

6.1 Introduction

Lefebvre argues that space is unfinished, since it is continuously produced, and it is always bound up with time (Lefebvre, 1991). I will further argue that every school produces its own and unique spaces. Although school spaces have a specific and central function, i.e. to provide education and schooling, I am going to look at what the newly appointed principals had in mind to change, what plans they had for the unproductive spaces within their schools, what they did to re-appropriate such spaces, and how users responded to the newly produced spaces.

Just as pragmatism bridges the divide between materialism and idealism in a dynamic of informed action, so does Lefebvre’s triad bridge the gap between physical space and the mental representations thereof in a *dynamic of embodied social space*. This chapter will highlight how embodied space is actually instantiated by looking at the actions that three school leaders have taken in the production and re-appropriation of the spaces at their schools.

6.2 Analysis of qualitative data

Qualitative data analysis involves making sense of data in terms of the participants’ interpretations of the situation and in terms of the contexts in which the data were obtained, noting patterns, themes, categories and regularities, (Cohen et al., 2011:537). According to Cohen (2011:537), there is no single or correct way to analyse and present qualitative data.

The data of my study are analysed in terms of the concepts elucidated in a preceding chapter, viz. spatial practice, representations of space and representational space and transformational leadership. In analysing my data, I compared similarities between the three schools in my study and examined patterns that the qualitative data presented, in order to get a deeper understanding of what actually was happening in the three
schools. In order to do so, I use a pragmatist framework which focuses on the interplay between school spaces, leadership action and users' meanings. I decided to group the analysis of the data into three main sections: the spaces that were not working; the way in which an inclusive approach was followed in conceiving and re-appropriating these unproductive spaces; and then what these newly changed spaces embodied and how they are used. I will analyse the data before highlighting relationships in the synthesis section in Chapter 7.

6.3 Historical context

Lefebvre (1991) reminds us that physical environments have histories and that humans are a part of them. A school space is conceived and designed and produced through labour, technology, regulations, organizations and institutions, but the meaning of the space and the use of the space is adapted and transformed as it is lived and perceived through teachers, learners and parents. It is a social production (and re-production) of space within an historical context.

The study includes principals from on the one hand the public sector (two government schools) and on the other hand the private sector (one independent school), and comprised both a primary school and two high schools. To make it easier for the reader to understand and contextualise the various answers, I have decided to codify the principals and the school each represents as follows: (1) the public primary school principal is referred to as PP; (2) the public high school principal is referred to as PH; and (3) the independent high school principal is referred to as IH.

Principal PP is the principal of a public primary school (Quintile 5 and former Model C school) in a large rural town, situated in an affluent neighbourhood, and draws middle class learners from both historically advantaged and disadvantaged backgrounds. There are learners at the school from poor neighbourhoods who receive financial aid or support through a reduction of school fees to assist their parents in paying the school fees. The principal has been 28 years in teaching, and head of the school for 15 years. There are 750 learners and 40 teachers at the school.
Principal PH is the principal of a public high school (Quintile 5 and former Model C school) in a large rural town, situated in an affluent neighbourhood, and draws middle class learners from both historically advantaged and disadvantaged backgrounds. As in the case of the school of principal PP, there are learners at the school from poor neighbourhoods who also receive financial support to assist with the payment of their school fees. The principal has been 35 years in teaching, of which 25 years have been at the current school, including the last five years as school principal at the same school. There are 620 learners and 40 teachers at the school.

Principal IH is the principal of an independent high school, situated in the countryside, surrounded by beautiful wine farms, with a mountain range as a beautiful backdrop. The school draws higher middle class learners, and has a bursary system that caters for a number of learners from historically disadvantaged backgrounds. The principal has been 26 years in teaching, of which 12 years were at a university and 12 years teaching in high schools. For two years he was an educational consultant. He has been principal of this school for nearly two years. There are 575 learners and 55 teachers at the school.

Two of three selected principals had all been at the helm of their schools during a five year period in which their schools achieved academic success, as measured by the external systemic Grades 3, 6, and 9 examinations, as well as the NSC Grade 12 matriculation examinations (in the public high school); the independent school wrote the Grade 12 Independent Examinations Board (IEB) examination. The three schools, two public schools (one a primary school, and one a high school) and an independent school (a combined primary school and a high school), have constantly and over a 5 year period achieved a 98% to 100% pass rate in the various grades, as measured during these external examinations. These three schools have furthermore excelled on cultural, as well as on sporting levels, and noteworthy achievements have also been recorded on provincial as well as on national level.

6.4 The inherited physical spaces that needed change

What were the perceived physical spaces that each of the three principals in this study inherited on being appointed as new principals at their respective schools? Were they
content with the given spaces? Were the spaces working for the school? If not, what were they planning to do about it?

The answers the three principals gave were rich in meaning, yet at times differed significantly from one another, possibly due to the fact that their working experience and the context of their schools differed quite substantially. During the interviews and observations at the three schools, it became clear that not a single principal had been satisfied with the physical spaces they had inherited at the schools to which they had been appointed. Both principals PH and PP saw the immediate need to change the physical space of their schools, and principal PP said:

“… the spaces would not work for us … we needed to change it [them]…”

Principal PP was more vocal about the perceived spaces at his school, possibly because the school where he started his teaching career was a “farm school” surrounded by agricultural land, rolling hills and a majestic mountain range. The physical space was breathtakingly beautiful. This might have influenced his views on space, and he added the following on the topic:

“… the spaces [at his new school] were not nice … some were just horrible … I needed to change it … to change it for the better!”

The two public school principals felt they needed to change the perceived or physical spaces the most extensively. Given the scope offered schools by the South African Schools Act of 1996, they could make these decisions quite easily. But first they had to win the support from their teachers and obtain support and authorisation from the Schools’ Governing Bodies. The principal of the independent school was fairly satisfied with the perceived space as he found it; it was a relatively new school, situated on historical farmland and built around an historical homestead. About the physical space at the independent school principal IH said:

“I have been pretty satisfied … I think as a new school … we have planned for the next 10 or 15 years. We need to continually grow the built spaces of the school. Probably, if there is one area where I wasn’t satisfied… it is around a
day like today … [it was cold and was raining heavily in the district during the focus group interview], the students have very little place to go to … there is very little covered student gathering space. Particularly now that we’re writing exams … they can’t go into the hall. They huddle in the corridors or sometimes go into the classrooms. On a beautiful day, obviously that problem is not an issue … because there are trees and there is space to go to.”

Both principals PH and PP were the least satisfied with the physical or perceived spaces, because they sensed that it was impacting on both the mental, or conceived, spaces as well as on the lived or social spaces of their schools. The schools in question were built during the Apartheid era, and were according to the authorities of the day functional, because the classrooms had walls, windows, a roof (not all had ceilings) and could seat between 35 and 40 learners. The colours of the walls and the linoleum floor tiles were the typical standard government dull grey colouration. The principals instinctively realised that these drab spaces would not contribute positively towards the mental wellbeing or motivation of the teachers and the learners. To them the spaces were stifling creativity and enthusiasm at the school. Being passionate as well as ambitious, these principals started to change and to transform their schools because they wanted “to change the school for the better.” They perceived the “old” physical spaces as stultifying. Principal PP explains:

“It did not give me a sense of welcome. I did not like the foyer … there where people coming into the school … the administrative section … the school hall … the outside area … the physical spaces … the classrooms. You might not realise it … but the outside areas … are just as important as the classrooms.”

There seemed to be no single aspect of the school that this principal was satisfied with. It led me to ask the following question, “What specific areas of the physical spaces at the school would you say were not working, or what aspects were in need of urgent change?” Principal PP answered:

“The whole school was not working. Things were not right … the staffroom was in a classroom on the far side of the school … away from the administrative section of the school … the cloakrooms were not near the main sports fields …
nor did the school have nice areas where the kids could play ... the teachers did not have a room to go to ... to duplicate their notes or documents ... the parents did not have a place to make a braai with the teachers ["barbeque area"] ... nothing was working ... it was not practical.”

I asked him what had been the first thing he wanted to change and why. Principal PP said:

“When I got there [to the school] it was the duplicating room. It had the photocopiers ... those risographs and all those things ... that a teacher is supposed to use ... they were just stacked underneath the stairs ... it had a door ... it was dark ... had no windows ... it was a horrible place to work and to be in!”

Principal PH, however, did not comment on how he had perceived the school space when he became principal, but rather referred to his first experience and perception of the school, when he had been appointed a teacher to the school, 22 years prior to being appointed principal. Principal PH said:

“The first time I walked into the school it was not nice ... it was cold and not inviting ... there was no warmth ... it did not have the feeling of ‘come and talk to me’ ... it was just clinically clean ... it was cold.”

Principal PH, however, saw that there was a “non-working” or “dead” space beneath a staircase leading up to the first floor of his school. He re-appropriated this “dead” physical space and placed lockers in the vacant space. While doing observations I saw how learners were standing and talking to one another while taking items from their lockers. By re-appropriating the perceived space Principal PH changed the function thereof and the attitude of the users changed. The lockers added value to the learners because they are functional and in
close proximity to their classrooms. The “non-working” or “dead” space became a new conceived and social space that benefits the learners.

Principal IH, who had been a lecturer at a tertiary institution, as well as a deputy principal at a distinguished school, and who had had the opportunity in the course of his profession as an educational consultant to visit many schools across South Africa, said this about South African (public) school design:

“… I have worked in schools … once famous schools that have now been neglected. It struck me that in the planner’s mind … in building those schools … not the old mission schools that they were … but the modern public schools that they are now … they shortchanged the teachers big time in their thinking about teacher spaces … the size of the classroom … the staff room … the nature of it … but also the idea of faculty offices…”

I asked principal IH to explain what he meant by saying that the planners of the public schools had “shortchanged” the teachers through design. Principal IH explained:

“The designers actually cheated the teachers … they designed schools … they gave them something that they would not have wanted themselves … they cut on the design to save [the state] money … at the expense of the learners.”

It is interesting to note that these transformational school leaders instinctively evaluate space, think about change, determine what is not working, can explain why it is not working, do their planning, get everyone on board, and then proceed with bringing about change.

The two principals of the public schools, however, started off effecting change much sooner than principal IH. They involved the learners, teachers and parents of their schools in drafting a new vision and a mission, which would become an active ingredient in shaping both schools’ futures. The result of their actions was that, in effect, the different role players in the school community all became joint owners of the vision and mission at their school. Their approach coheres with a transformational approach, which does not merely focus on bringing about change but also on involving
all in articulating the school’s vision and mission, thereby giving momentum to and sustaining the change.

Principal IH expressed the view that there were not many unproductive spaces at his school, and that he was fairly satisfied with the spaces that were there. What was, however, a stumbling block in his view, was the size of the classrooms. They were a little small, a factor that he believed hampered learning and teaching, especially when it came to group work. Principal IH shared the following views:

“I think that all the spaces at the school are important. At one level, it’s the most heavily used spaces that are the most important: the classrooms, the staff room, the outside areas, you know the social spaces. Then, and maybe this does distinguish school IH … we have a chapel as well. We also have the physical space of the actual campus where we are just starting to talk about creating some outdoor classrooms … actually trying to make something of the physical space outside the built areas so these would be a seamless area.”

The plans that principal IH had for his independent school refer mainly to the dominant perceived spaces for which he had new conceived spaces in mind:

“The heavily used spaces … the one that we haven’t mentioned so far … that I am particularly interested in improving on are … the staff room, the administrative offices, the faculty offices. I’ve seen this in many schools around the place and I think it’s a neglected area. So the staff room is one thing … it should get attention … as well as the faculty offices where the teachers get together either as Mathematics teachers … you know some cognate area … where they can get together and have a professional conversation …”

Both principals PH and PP agreed with principal IH about the importance of improving the used spaces at the school. They clearly appreciated the fact that the dominant lived spaces embody constructed physical spaces and conceived spaces. All three principals drew up short, medium and long term plans to make their schools more effective and more practical in this regard, and so had visions for changing these unwelcoming and unproductive spaces.
The three principals all realized that to effect true change would take time. They had to contend with certain given factors, such as the limitations of the geographical site where the school was physically situated, the physical layout of the school buildings, the sport fields on that site, and the mindset of the learners, teachers and parents alike.

What has become evident in their respective schools, is that principals PP and PH, independently of each other, have had the same type of plans in mind. They are both actively changing the physical spaces into new and vibrant lived and social spaces, with a given aim or purpose in mind, as principal PP says:

“To get the spaces to work for us…”

Spaces can become places that are inviting and stimulating, as well as motivating their users. Later in this chapter I shall refer to the new spaces that these principals have constructed and describe how the users make use of them. What became clearly apparent was the similarity in approach, thinking and sense of urgency that exists between the principals of the two public schools and that of the principal of the independent school, regarding the construction and re-appropriation of space at the different schools. Their responses to the question, “If you could change anything now at your school, regarding the physical and mental spaces, what would it be?” reflect their experiences of having witnessed the positive consequences of the spatial changes. Principal PP answered:

“I would have started changing the spaces much earlier … I could have started doing things much sooner … because when I started changing the spaces … the school immediately started changing for the better. Many of the changes that I had made … could have been done much earlier … we could have won two years and the school would have been much better off! I should have started changing the various spaces at the school much sooner … I made a mistake … I waited too long!”

Principal PH agrees with principal PP and says that:
“I should have seen to it that changes to the spaces at the school, were made right at the beginning [after being appointed principal]… if I had done it … the school would have been better off by now.”

To the question, why had they waited so long before they starting implementing these changes to the schools' physical and mental spaces, principal PP replied:

“You are a newly appointed principal … right … you arrive at your new school … and you think what do teachers hate the most … change … you then hold back … you try to please the teachers. I don’t think that I should have done that. I should have started changing things immediately. Yes, there are certain bigger things that would have had to wait… but the smaller things that would have made the school better … could have been done much sooner! I can think of so many things that I should have changed much sooner … so why wait if it is not necessary?”

Principal IH from the independent school, offered the following:

“It is interesting that I’m from the independent sector … and … you’re from the public sector [referring to principals PH and PP]. In the independent sector, typically a head is appointed for a fixed term, usually 5 years or 7 years. And so I think it’s almost built into that expectation that you have a limited time to make an impact. So you don’t wait … you get stuck in immediately … I’m wondering if there’s a difference in the public sector … where there isn’t that idea that you are here for 5 or 7 years. So maybe if there isn’t that sort of pressure to innovate … to change … it means you have to bring it much more from inside yourself, if you want to change. Whether there is a difference in the leadership experience between an independent and a public school? I’m asking that as a question.”

Principal IH responded to what he thought could be the difference between principals of public schools and those at independent schools, regarding transforming school space:
“The independent schools are based more or less on a business model if you like ... you are appointed ... you come in ... you’ve got a vision ... in your appointment you obviously talk about your vision. You have to strategize ... Do you listen for one year? ... look and listen? Or do you come in and try to implement changes from pretty soon on in your time. And then if you’re there, I mean I’m on a 7 year- contract. So I have a sort of theory ... I do look and listen for a 6-month period ... but from early on I indicated what my vision was ... then I know that I have 2 or 3 years to implement some of those changes and maybe I have a couple of years to see the fruit ... but I won’t see all the fruit ... because some of them will take a longer time to come through. So I think that dynamic of leadership or principalship in an independent school does create a different set of expectations about how you act in terms of change in relation to the space. Whereas at a public school...you see I’m here for I don’t know how long ...?”

Principal PP has been principal for 15 years and Principal PH for 5 years. The three of them agreed that one of the main differences between the two types of schools is the constraints in terms of which principals can operate. They also conclude that in the public sector domain, the principal’s job is mostly protected, that he or she is not bound by a contract to perform in a clearly defined way, and that this relative lack of specific expectation and accountability could lead to a lack of urgency and a possible lack of creativity in this regard. Principal IH said:

“Once you have been appointed a principal in a public school, you can remain there until you retire. In an independent school, you are on a 5 to maximum 7 year contract, and then you need to move on ... you have a short time to make your mark.”

Irrespective of whether the principals were from the public sector or the private sector, they shared a common view of the need to improve the physical spaces and mental spaces at their schools. In the next section of this chapter, I am going to look at how they used their transformational leadership skills, in order to gain support in transforming the various spaces at their schools.
6.5 The process of transforming new spaces

If the citizens of Paris could transform the Halles Centrales from a place of food distribution to a place of joy and celebration, to what degree can a school principal transform his or her school into a place where there is energy, motivation, inspiration and good educational practice? How can a dull or drab space be changed into an inviting and educational conceived space, that motivates learners and teachers to become enthusiastic and want to be part of the school, and which brings the best out in them? Who are the role players that would be involved in such a process?

Before the principal can embark on such a programme of transforming the physical and mental spaces into something new and fresh, he or she needs to get the constituents to buy into the project. These constituents should consist of the stakeholders in a school community, as defined also in relevant legislation, namely learners, the staff members (the teachers, the administrative team and the maintenance and support staff) and the parent body. So in this section I am going to look at how the three principals set about getting others to support them. In doing so, they transformed the perceived and conceived spaces at their schools into new vibrant social or lived spaces. What did they do to get the buy-in of others?

In chapter 2, I referred to the preferred leadership style that research has highlighted as the most appropriate during times of change and transformation and which Davies (2005) has described as transformational leadership. The key concepts or characteristics that define transformational school leadership, as conceptualised by Leithwood (2005), are:

• building school vision;
• establishing school goals;
• providing intellectual stimulation;
• offering individualised support;
• modelling best practices and important organisational values;
• demonstrating high performance expectations;
• creating a productive school culture; and
• developing structures to foster participation in school decisions.
I am going to examine how the three principals embodied these characteristics when they negotiated and co-produced the various spaces in their schools. During the focus group meeting, interviews and observations, I noticed that these three school leaders strongly portrayed transformational leadership qualities, and a focus on action or results. They hold a balance between reality and idealism, between hard facts (physical space) and soft facts (social beliefs). They further have a strong influence on all facets of school life, and I saw how their influence is not just localised in the principal’s office, but penetrates all aspects and places of the school.

Principal PP says:

“… your influence on your learners, teachers and parents must always be positive, and should be felt at all levels and within all school activities, whether it is inside or outside the school …”

Principal PP explained this by saying that he personally wants his influence to be felt the most within the school’s curriculum, because he wants:

“… to make sure that the learners are 100% ready for high school, and that they have mastered the curriculum … you must always remember that you [the principal] are in charge of the curriculum. I think that too many schools may think that it is the job of the deputy principal to run the curriculum … but that is not right … And the other one is accountability. You may never delegate your responsibility and should always be accountable for what is happening at your school”.

Principal PP recognizes the importance of having a supportive environment to build learners’ self-esteem:

“It is very important for me that a child … the high school people can say if it’s wrong or right … that a child develops a positive self-image … to me it is the most important thing … I don’t care if you remember when Jan van Riebeeck came to the Cape or not. If you have a good self-image, then you’re halfway there … you will make a success of your high school. But if you start wrong in
the primary school, then you’ve got trouble. So my main influence at school should ensure that the learners are confident and have a good self-image.”

Principal IH too sees the importance of a hands-on, involved leadership style:

“… my influence extends from the administration building into the classrooms, into the administration buildings and even onto the school grounds, the staff and the organization of those facilities and the people involved there …”

This pervasive influence, however, is primarily exercised through an inclusive process of participation. Principal IH explained the importance of involving staff members in the planning phase and construction of new learning and teaching spaces at his school as follows:

“When the first Science building was built, probably 12 years ago, the Physical Science teachers were asked how they would like their teaching space or classroom to be, so were the Life Sciences, and Biology teachers and others were asked. And they all came up with different designs. The Biologists wanted a common experiment area, but have their offices, storage spaces, and teaching spaces outside that space. Whereas the Physical Scientists wanted one big classroom with an experimental area at the back of the classroom and a teaching area in front of the classroom. And they were built like that. A founding school can do that especially if the teachers are given the space they have requested. And as we’ve been putting in new classrooms, I’ve been asking that question in the staff room when I talk about our building plans … what role are you [teachers] … playing in the design of these new classrooms? And they are not subject-specific, so they are not as defined as Biology or Life Sciences classrooms. But certainly there is a culture at [School IH] that teachers should have a say in the design of a learning space … which I think is good … it gives them all buy-in.”
Principal IH’s approach is in line with several of Leithwood’s 8 characteristics of a transformational leader, and focuses on the building of a school vision, establishing school goals, providing intellectual stimulation and most important involving the staff in decision making. Principal IH also offers his parents intellectual stimulation and invites them to participate in an educational conversation:

“I write a weekly newsletter which goes out to the whole school community … and I like … in that newsletter to promote a questioning approach as part of what I do … what I stand for. To come back to my earlier comment about being an educational leader, I see that as one of my roles as an educational leader … is to ask questions.”

Principal PP says that he has been able to change the physical or perceived spaces at his school because he waits for the right moment to invite his staff and/or parents to be part of the decision making thereof. He says that in doing so, he gets the necessary support and buy-in from everyone right from the start, and a successful outcome follows in most of the cases. Principal PP says:

“It is all about timing … your timing should be just right … it must be good. You should not ask a staff member at the end of a term … when they are tired … to give advice or ask them to do something … or bring about change in their classroom or in their department. Do it when they feel fresh and energized … for example just after the holidays. Timing is crucial! For me personally, I like to change things, build or paint the classrooms before a long holiday. So when the teacher comes back to school … she starts with a ‘bang’ … she says ‘wow’ … I
can’t believe how it looks … they have done this for me! The changes to the [physical] spaces give them [the teachers] energy!”

Principal PP has a distinct transformational leadership style that penetrates right into the heart of teaching - the classroom. On the day of my observation, during the middle of May, he had just completed his 40th class visitation, by physically spending a couple of periods of the day inside a classroom, observing and monitoring the teaching practices that were taking place in his school. What impressed me most was that there is a culture at the school which is free of fear, where the teachers invite him into their learning spaces, where he inspires them and gives open and honest feedback. On feedback principal PP said:

“They must know what you [the principal] expect from them. I spoke to a teacher today just before I came … [to greet me while I was doing my observations]. It is important to me to tell her what is good … her good practices, but also give her advice what she can improve on or not. I visit all 40 of them in their classrooms … I see how they operate in class … I see the good stuff and the bad stuff. You have the responsibility to tell them what is good … I do focus on the positives, definitely. But the younger teachers, this lady who was with me today is two years in the teaching profession … so she is still learning. I always tell them … that I want them to be creative … that they must think outside the box … they must go for it … I won’t hold them back. I tell them that they may make mistakes, it’s no problem, as long as you learn from it.”

Principal PH, says that he does not do as many class visitations as principal PP (Principal PH is 15 years older than principal PP), but he gives his staff individual support, space and trust, and believes that this could be part of the reason why his staff are working as well as they do, and why the parents support the school. He achieves this by creating an environment where his staff feel valued and important and are given to a large degree a free reign in doing their work as they deem fit. By trusting his staff that they will approach their work ethically and professionally, they reciprocate by producing honest and good work that benefits the learners. In section 6.6 I look in more detail at the environment he has created that makes them feel valued and important.
Principal IH says that he also does not do as many class visitations, but is brought up to speed by his senior staff that do classroom visitations for him, and who continuously update him on activities taking place in his school and in the parent community. He sees his role as a school leader to set school goals, to inspire, to stimulate, and to influence all, and to ensure that their actions are in line with the school’s shared vision, mission and ethos. Principal IH does this by encouraging involvement and critical engagement:

“One of the challenges facing school leaders is that it is no longer the norm that as the principal ... you are something ... and people listen. It is much more motivational leadership which is drawing people in to a common vision or a common project. So it’s a flatter structure ... it’s much more mobilising and influencing people than instructing people ... you need to stimulate and to motivate your teachers and parents ... get them to question their own modus operandi ... and get them involved at the school. That is definitely the modern leadership challenge”.

All three principals have attended various national and international educational conferences, are avid readers and stimulate their learners, teachers and parents on a regular basis by sharing with them the latest news on education, or providing information on books they have read and conferences attended. They also encourage their teachers to attend educational workshops and conferences. Principal PP has attended the past six International Confederation of Principals’ Conferences (ICP) that take place biennially. He encourages the parents of his school to participate in education conversations or debate by broaching educational matters that might be of interest to them, in his weekly schools’ newsletter and other Parent Information Meetings. Many of his parents come to the school and engage principal PP in educational discussion, in many of the cases in a one-on-one situation.

Principal IH offers individual support to his teachers, demonstrates high performance expectations, and stimulates his staff:
“… by asking my teachers to think of themselves as intellectuals. That maybe is not easy to implement, but by intellectual I mean that as teachers, we want to take charge of ourselves as learners … you know the teacher should also be a learner … that is what I encourage. So we don’t see ourselves as transmitters of other people’s knowledge, but we are actually become original in our thinking. And we excite the learning in our students, because we ourselves are original thinkers. And as a leader, how do I create that? By going to a conference is one, but I also believe in my one-on-one with teachers by saying to them: how do you want to grow yourself? You need a way of thinking about yourself as a learner … how you can grow as a learner … and what you should do to accomplish it”.

Principal PP says that he stimulates and motivates his teachers on a regular basis:

“If I can say one thing, I encourage them [the teachers] to read. I like reading myself. I’m a big John Maxwell fan and then other motivational books, on leadership and so on. And I must tell you … I motivate them to read … I ask them to tell their colleagues what they had read during the holidays … and tell me something about the book they have read … because I also want to learn something new. If I look back now to my studies at college and at university … the most things that I’ve learnt … is not there … it is out of books that I’ve read. I encourage them to read … what I actually do … is to make them inquisitive … so that they can go and read on their own.”

Principal PH has a slightly different approach in creating space for teacher development and motivation, by identifying that he also has needs and says:

“… but I also need space. My own space. In that space I can create my own knowledge … create new knowledge … can think and read”

Burns (1978), the father of transformational leadership, was one of the first scholars to assert that transformational leadership not only creates change and achieves goals within the environment, but changes the people that are involved as well. He describes transformational leadership not as a set of specific behaviours, but rather as
an on-going process by which “leaders and followers raise one another to higher levels of morality and motivation” (Burns, 1978:20).

It is clear that Principals PP and IH are strong personalities, but their influence is not a top-down decree. Both actively involve their school members and both are focused on improvement of the whole school. During the interview, principal PH agreed with the two other principals about a leader’s influence, but was far more hesitant than the others and said that:

“I hope that my influence is inside the classroom also. I don’t want to sound too important, but I think … well I hope … the whole school and the school community, parents see it like that …?”

When I visited his school to do the observations, I observed that his influence was far greater than he perceived it to be, because it was felt throughout the school, from the perceived, conceived through to the lived spaces. I could see it by means of how the learners and staff interacted with him, how they came and spoke to him. It was clear that he was a respected and loved principal. Although he is the oldest of the three principals, he is the most junior of the three with only 5 years’ experience as a school principal. This might be the reason why he was hesitant to talk about the influence he exercises at his school. His influence is felt on the physical space, mental and lived spaces. When I arrived at the school to do observations, builders were busy modifying the entrance to the school’s hostel, by building an impressive and dominating thatched roof entrance, that according to principal PH:

“… would let the hostel kids and their parents feel good …and proud … when entering the hostel …”
Principal IH demonstrates a pragmatist view when he says that a leader:

“Should be a strategic thinker, be an agent of action, cherish his staff, and have a realistic outlook on education”.

Principal IH creates change by encouraging his staff members to have an internal dialogue with themselves, to reflect on where they see the school, but more specifically, where they see themselves in future. He achieves this by stimulating his teachers intellectually (getting them to challenge their own beliefs, attitudes and values), encouraging them to be part of the team that builds the school’s vision, mission as well as establishing school goals. During the focus group meeting all three principals explained the importance of keeping their schools’ visions and missions alive and on the ear of their constituents. They do it by incorporating snippets thereof whenever making speeches or when addressing groups informally, and by displaying accomplishments in line with the school’s mission in prominent public places, such as the foyer. They believe that this assists them in guiding their schools towards the future, and in achieving their aims.

Principal IH invites his teachers and parents to help determine the vision and mission of the school by asking them to reflect on questions such as:

“Where do you see yourself … or where do you see the school … in 5 years’ time? How do you think we are going to get there … what are your contributions going to be …?”

In order for them to think carefully and creatively about the school’s practices, spaces and trajectory, principal PP encourages them to:

“Create your own knowledge, add new knowledge to your existing knowledge, don’t ‘photostat’ other people’s knowledge. Think, read, ask questions, surf the internet, write and publish an article … and challenge my e-mails, send me an e-mail message, challenge everything I do … and whatever I say as a principal … just challenge it!”
Given these principals’ large personalities, it might be easy to use their influence, strong beliefs and energy to overpower the members of their school and for their leadership to slide into an exercise of power. However, the threat of this is greatly mitigated by their genuine invitation for their beliefs to be challenged.

The three principals, do not just invite their teachers to challenge them, but also use the same approach when engaging with their parent body. Their mature and non-threatening approach where they encourage conversation about the schools’ future and develop structures that foster participation in the school’s decision ensures that there is buy-in by all. The school is a vibrant embodied environment: the physical structures and inclusive decision-making structures make the participants feel valued.

Principal IH realises that it is important to create shared space and time at his school to reflect on practices, but due to a full programme, he feels that this does not happen as much as he would like:

“We have a weekly staff meeting - we start our school an hour late on Wednesday mornings and the main purpose of that is to allow the staff to have an hour’s meeting in the week. And it used to be predominantly a business meeting, just going through a structured agenda. I would like us to put every second week time aside on the agenda and to talk about a topic, such as people who went to conferences and can give the rest of the staff a report back. I’ve raised a lot of questions around education in those meetings. I think the big challenge in this whole area of professional space is that schools are very procedural places. The timetable is full … we go, we go, we go … there is a packed curriculum … how do you create time and enable the teacher to have energy to do what we’ve just been speaking about – intellectual stimulation and educational debate? I think that’s a huge challenge that we face in our busy schools, to create those breathing spaces for reflection. Good schools are strong procedurally, they work well and efficiently, but to be a great school, you need to create time and space for reflection, but how can we do that? It’s a very important and challenging question.”
It is only in principal PP's school where specific time and space is deliberately set aside to discuss and philosophise about educational matters. Both principals PH and IH engage their staff in educational matters, but presently this is done informally. Both, however, are considering setting shared space and time aside in which they will have a formal slot on their timetable to reflect on their practices and other educational matters. Such a slot would strengthen a sense of being in a professional growth process.

Principal IH encourages and stimulates his teachers by saying:

“My staff know that one of my favourite sayings is: ‘good questions generate good answers’. And I ask a lot of questions and my leadership staff and I think this idea of the grey, and the black and white. The questions challenge the black and white and they promote the idea of complexity. And I think promoting complexity is a good way of stimulating our teachers. It has to be clear … we need clarity … but we also need complexity. It's that difficult combination of having the simplicity of what we want to say, we must be able to communicate things, but we must have an idea that education is a very complex, multi-layered process. And somehow if we can ... well I stand for both of those things ...”

The pragmatist William James, expressed his views, in his *Principles of Psychology* (1890), that truth is verifiable to the extent that thoughts and statements correspond with actual things, as well as the extent to which they "hang together," or cohere, as pieces of a puzzle might fit together; these are in turn verified by the observed results of the application of an idea to actual practice. James argues that at the core of this is intelligence as an instrument of human survival (Rorty, 1982). All three principals display this by questioning the practices that are taking place at their schools, but also using their intelligence in order to promote their school and to ensure that their teachers and learners are well equipped for the future.

Principal IH feels strongly about creating changes in the physical and mental spaces in a school by challenging the functionality thereof, and believes that in doing so the
skills of both the teachers and learners are developed. He says that his parent body are:

“Always interested in new ways of thinking, asking questions, and they actually are looking at good schools to promote that culture.”

This is a clear indication that within education, parents are continuously looking at the products schools are offering, are holding principals and schools accountable and are comparing them with one another in order to make a choice of education for their children. This does not just pertain to principal IH’s independent school, but both public schools in this study as well. The parent bodies at the schools of both principals PP and PH expect their schools to foster a culture of critical thinking culture. The parents are predominantly from an educated middle class and have mostly done well in the economic arena, measured against the fact that they are able to purchase a house in a sought after suburb in an affluent rural town.

Principal PP is acutely aware of the importance of the Sigmoid Curve, and believes that the school should think about renewing itself, especially at the time when the school is doing well. He believes:

“If you want to grow, you must change. I believe that many times you make a mistake when you start changing things when it is too late … when you’re on the way down. I believe that you must start changing things [at your school] when you’re on the way up to the top … where you are in on a roll … that is the time when you should consider to change … before you drop!”

Principal IH who is actively changing and transforming his school, describes himself as a transformational leader who embraces pragmatism:

“I think firstly I want to say that that I am an educational leader, and an educational role model. Someone who stands for the values of education. Secondly an educational leader … who is a custodian of values for the organization … and thirdly a motivator of people, and obviously there are the various constituencies of staff, students, parents and alumni. My job is to
promote and lead organizational synergy and efficiency. To be a strategic thinker and to be an agent of action”.

All three principals said that once they received the support from the teachers and parents, they could co-create and change the perceived spaces or physical spaces for the better. The support came in the form of their constituents understanding what the principals had in mind, agreeing with the motivation, and starting actively to promote the proposed projects as if they were their own. According to Leithwood (2005) this a characteristic of a transformational leader, and Burns (1978) would agree, that transformational leadership does not only create change and achieve goals, it changes people’s mind-sets and gets them involved by means of buy-in and ownership.

Principal PH was the only principal who had to go considerably out of his way to get buy-in and support from his teachers. This might be because he was the longest serving teacher of the three - 27 years at his present school (5 years thereof, as principal) - and his staff might have grown used to him in his previous role. Then after 22 years he became the school’s principal, and realised that he was now able to steer the school, but needed the support from his staff and School Governing Body to do so. The first new course that he had decided on was to transform the physical and mental spaces to new embodied lived spaces at his school, as he put it:

“… to make it a better place …”

Principal PP got buy-in from his staff right from the start after being appointed principal, by involving them in understanding the importance of producing new space. He used constructed space to inspire and motivate his teachers and instinctively followed most of Leithwood’s (2005) 8 characteristics of a transformational leader. As a school leader he uses perceived and conceived spaces to achieve his aim of ensuring his teachers remain motivated and his school remains a centre of academic excellence. Principal PP offers advice:

“You can only motivate your staff … if you are feeling motivated yourself … you must have the right feeling. It’s a challenge … to work the whole day … and
then still to keep your staff motivated. That’s why I make the school nice … the school [physical and mental spaces] helps me motivate my teachers!”

Principal PH says:

“Staff … teachers … it’s a dark world [all laugh]. Learners accept change much more easily and quickly … they listen to you … if they are sure what you are saying … they then say let’s go! But teachers are not so easy … but the moment you have convinced them … about the merits of the project … and they have bought-in … then everything is OK. But for me … the biggest challenge … is to convince them to change …”

The two public school principals had the challenge of motivating and convincing their staff to change their methodological approaches when they started moving towards producing 21st century learning spaces at their schools, by integrating ICT with the curriculum, and embarking on empowering their staff with the necessary skills to be confident and functional within these newly conceived learning spaces, and be able to use the ICT tools that are available to them. In practice the change did not come easily. The staff was reluctant to change their methodological approach to include ICT which many teachers feared in the late 1990s and early 2000’s. Principal PP made use of a most ingenious approach. He convinced the most unlikely teachers who seemed most resistant to embracing ICT to do it first. Although principal PP had achieved early buy-in from his constituents for producing space, ICT buy-in seemed a little more difficult.

Principal PP said that when he started experiencing resistance from his teaching staff he turned to the older teachers. Principal PP explains:

“I have about 3 or 4 teachers older than me, 50 plus, and when we started using laptops and technology at the school … all were scared … the older ones as well. I’m thinking of one … she didn’t like this thing … and then we decided we are going to give everyone a laptop and with that laptop, we put in a flat screen TV in every class and whiteboards in a few. And I’m telling you that the visits I’ve done now, she was one of them who uses that thing like you won’t
believe it. Everything is rolling. She uses the internet, flash drives etc. ... it is unbelievable and she was scared of that thing 6 months ago. So I think that the principal must think how he’s going to get the staff to accept change ... but only to change for the better. There is nothing nicer than to see a well prepared lesson ... with colour and graphics ... and the children enjoying it. This old lady is using IT as if she was born with it ... it is an example that you don't have to be an IT boffin to use this IT thing. And the nice thing is if you've got your stick ... you go home and you prepare ... you come to class ... put it in and there you go! And when the staff realised that the older staff members were using it, the rest of the staff followed, they saw that it was easy and nice! By getting the older teachers to use it first ... I got the whole staff to use it ... I turned them around.”

Here again is an example of how the conceived space of ICT-teaching together with the physical space of interactive whiteboards created a vibrant lived space with pedagogical richness and educational meaning. And once this embodied space was witnessed by others, it was re-produced in all the other classrooms.

ICT classroom at school IH

ICT classroom at school PP

To be able to get the support for the change from their school communities, the principals first needed to get the support and co-ownership from their teachers. Principal PP explains how he went about doing this and how he received co-operation in re-creating social spaces:

“I believe that it is important to give your teachers every year a questionnaire to complete ... I am not scared ... I give them a questionnaire. You become very exposed ...but you ask your teachers what they think ... what their opinions are
... and what they would like to bring to your attention. Everyone must have a voice ... and every voice should be heard ... especially about the physical amenities or space at the school. No teacher should beg to receive something at the school ... especially if it is something that will improve the teaching in the school ... make it more functional ... be an improvement ... he must receive it ...

Listening to the three principals giving their relatively “easy” answers about how they first got the support from their teachers and then from their parents to go ahead and change the physical spaces at their schools, especially after so many years and where (at only the two public schools) not much change had taken place, I could clearly see their desire and passion to transform their schools. I sensed that they had to be bold and change the entrenched thinking of those around them, win them over, before their dreams for their schools could become a reality. They succeeded in the end because of their transformational leadership attributes.

In addition to having inspirational and motivational abilities, these three principals demonstrated an acute sensitivity to the needs and concerns of their school members, which made their transformational leadership even more effective. These three principals relayed how they would strategically wait for the right moment to engage their constituents fully and so strengthen the notion of a co-created social space.

Once the three principals had the buy-in of their constituents, they proceeded to transform the school’s physical spaces and mental spaces into fruitful embodied spaces that motivate and inspire users. The lived and social spaces that these three transformational leaders created were free of fear, which encouraged their teachers to take risks, and to grow academically. Principal PP believes that principals should not stifle teachers’ initiative and creativity by wanting to be in control the whole time:

“There are many times when you as principal should just sit back and let the teachers do the work. I believe that there are many things that my teachers do better than me ... so I allow them to do it ... I believe in empowerment ... I want to give people the chance to do something on their own. I firmly believe that people may make mistakes ... they must not fear making mistakes. Henry
Ford’s first car did not have a ‘reverse’, but he continued making cars. We must allow our teachers to make mistakes … but we must also think carefully who we want to give the task to … think about the consequences … otherwise it could be a disaster … in that case you should do it yourself.”

Principal IH also believes in empowering his teachers, and making sure that the school offers them the opportunity to grow and develop by means of workshops, courses and conferences:

“At my school the teachers want to develop, it is my responsibility to make sure that they have the space to grow … which they could do even … if there was not a very good building or physical spaces … more of a psychological and professional space, in which they could grow … your thinking creates that space …”

Principal IH, of course, recognises that having “good” buildings and physical spaces would facilitate professional growth so much more. In Lefebvrian terms, “good” physical and mental spaces enrich the embodied lived social space.

Principal PH, the least talkative of the three principals during the focus group interviews, said:

“You must question everything you do. You must question your own beliefs … not all the time … [“nie derms uitrek nie”] but you must question it because you are going to get questions … hopefully, from the learners. So you must be ready. And then the other big thing … I am not sure if I’m successful at it … but stop being scared. Don’t be afraid…”

The three school leaders make and take time to reflect on the use of space. They achieve their aims of changing the school spaces for the better, by making sure that their own personal thinking and their strategies for their schools are co-developed with colleagues, that systems and structures are in place, that people are involved in decision making, that their constituents’ voices are heard, that the constituents feel
part of the school team and that their contributions are appreciated. With this in place, change followed.

6.6 The new transformed physical spaces

The preceding two sections looked at unproductive spaces and the action that the school leaders took to co-produce and transform them. This section will focus on the meaning that the users exhibit in their uses of the transformed spaces. In pragmatist terms, I focus here on the interplay between meaning, action and space; in Lefebvrean terms, I shall look at how the transformational leaders and others use the integrated physical, mental and social spaces at their schools, and how they transform and re-appropriate them when the need arises. I will discuss this under headings denoting the major spaces - embedded lived spaces - in a school, viz. the reception area, classrooms, staff meeting rooms, and the school grounds.

The physical spaces or perceived school spaces that the principals have constructed or are in the process of transforming are used effectively to influence how the users of the various spaces think about the school. These principals keep the “primacy” effect in mind when producing the spaces at schools. They are aware that the first impression on entering a space shapes lasting meaning of that specific place or school. With this in mind, the principals have paid careful attention when constructing and transforming perceived spaces. In other words, they are keenly aware of the link between the physical space and the meaning it signals. The three principals in this study all concurred that whatever space is being created or is being produced at school, the final product should be inviting and have a motivational effect on the users.

A few short studies have been done in the field of colour psychology to determine the effect that colours have on the human mind and the way that things are perceived and processed. Fraser and Banks (2004) argue furthermore that “colour can be used to influence and shape our perception of our environment” (Fraser and Banks, 2004:6). When the principals were asked if they had on specific occasions chosen a certain colour of paint to create a certain atmosphere or achieve a certain type of response from the learners, not a single principal answered in the affirmative. Principal IH says this of the use of colour at his school:
“I haven't used colour. Over the years that I've been there, I've insisted that the whole school should be repainted, so it looks good, but we have a standard format of white-coloured buildings. The classrooms, I think there have been some teachers who've had the liberty to paint their classrooms a particular colour, which has been important to them. But that clashes with the facilities people who want to standardize colour, because when that teacher moves on or there is a change, then they have to repaint the classroom. But it is a good question that … I haven't really thought enough about it … using colour to create mood … or effect.”

The question moved to another factor that can influence behaviour in a given perceived or conceived space and that is by infusing the space with the playing of classical music. Only Principal PH said that he plays classical music in his school:

“… when we play classical music … the learners become calm … and are more peaceful than before … it helps with the discipline …”

6.6.1 Reception areas

At all three schools, the entrances have been well-constructed, one senses a welcoming and inviting feeling on entering.

This impression is strengthened by a neat entrance to the school, clearly signposted so that the users don't have to ask for directions when entering and can arrive promptly at their destination without frustration or awkwardness.
The foyers as conceived spaces send out a message of school pride and a sense of community because they are infused with the school’s symbols, flags, vision and mission statements, tradition and “halls of fame” where the school’s achievements and past activities are displayed.

On being appointed principal, all three planned and strategized to change the school environment, and ensured that the infrastructure and school grounds were neat and well kept. They realized that the first impression that visitors to the school would get would convey meaning, which would be a lasting impression and this became their main spatial focus.

The three of them ensured that symbols, flags, mottos, the schools' vision and mission were prominently displayed. Principal PH says that one of the first things he did was:

“… to display the school’s flag, trophies, success stories, and the school’s values in the school’s foyer. When people enter the school, they must see what our school stands for … they must see the values that we stand for … they are displayed inside the school.”
In my observations, I noticed that the school’s values were also displayed on the outside on the steps leading up to the main entrance of school PH.

At this school, a section of the foyer is set aside where the Grade 12 learners and the Learner Leaders (RCL), hold their meetings. The reason why they meet in the school’s open foyer is to signal that at his school, they believe in democracy and transparency.

During my school visit, I observed how the young learners of this high school are invited into their “seniors’ space”, and have the opportunity to listen to the discussions and debates that take place amongst the seniors of the school. By using this space in such a manner, the school sends out a message of inclusion. This is an example of how the physical open space and the mental space of engagement are embodied in the social space in which all learners are drawn together in vibrant debate. The meaning of the foyer has been transformed for learners through its use.

Principal PH shares his thoughts about what the re-appropriated space in the school’s foyer signifies:
… at our school we care about you … you are welcome … you are part of us …”

At school PP, the principal has built a “shelter” at the entrance where all can gather on inclement days. Leading from it is a new walkway, through a well laid-out garden and around a beautiful fishpond, which has water spouting from a fountain in its center. It is aesthetically inviting and signals that the school is a special place that values its users. Principal IH’s school has a majestic entrance, a long drive through vineyards with sports fields on both sides and on the last section just before one reaches the main school buildings, one drives through a beautiful gate and garden.

The historic homestead, which has become the administrative hub of the school, is surrounded by century-old oak trees. In line with the other two principals, principal IH says this of the use of this conceived space at his school:

“For me … the most important spaces are those that promote a sense of welcome … like the entrance to the school … people should feel welcome …”

Principal PP negotiated with the local municipality in obtaining a section of land that was not being used. He had it upgraded, paved and this physical piece of land has become a new space where the parents park their cars and meet each other. Principal PP says this of the new use of this embodied social space at the entrance to his school:

“It’s all about taking care … showing that you care. It is important what the physical spaces look … neat, tidy … look good … this all sends out an important message … you are welcome at our school”
6.6.2 Classrooms

In addition to their plans of changing “non-working” spaces into functional working spaces, in other words getting the spaces to work for them, all three principals agreed that the classrooms or learning spaces were the most important spaces at their schools.

Principal PP’s categorizes the various spaces at his school as follows:

“The most important space at a school is the classroom … indoors or outdoors … then the other areas. The entrance to the school, the foyer, the reception area, the administrative section … they are also important …. this is where the people enter or connect with your school for the first time. One might think that’s not so important, but I think that the physical space … outside of your school [school building] is also important.”

Principal IH concurs:

“I’m trying to think of the most important. In a way we’ve been saying that all the spaces are important. At one level … it’s the most heavily used spaces … that are the most important: the classrooms, the staff room, the outside areas … you know all the social spaces.”

The three principals agree that the classrooms are the most important physical and mental space in their schools. When school leaders produce inviting spaces that motivate the users, it sends out an underlying message that the school, its users and its tasks are valued and are important. The three principals agreed that they could not change much regarding the physical attributes of the classrooms, such as the windows, lights, flooring and ceiling, but they could in effect influence the mental spaces in the classrooms, by encouraging change such as making these educationally inviting and intellectually stimulating. At schools IH and PP they added decks in existing learning areas to increase the floor space.
All three principals say that they urge their staff to think about how they can change their learning spaces into new inviting and vibrant ones, that “actually talk to you” when entering. This is done by displaying their learners’ work on the walls and boards, they acknowledge the learners’ good work, and in the process motivate them to continue producing more good work, and furthermore encourage other learners to follow suit.

Principal PP had just arrived back from doing a class visitation in the classroom of one of his beginner teachers and shared the following experience with me while I was doing my observations:

“I commented to one teacher today [teacher X] ... her classroom is not very inviting ... it’s a bit dull ... and I think that we must change ... we must do something about it ... it’s supposed to ‘talk to you’ ... we must make it inviting.”

It was interesting how he broached the subject of getting the teachers to rethink her learning space, in accordance to the latest research done on how to create effective learning spaces. While he was doing the class visitation, he was also at the same time monitoring each teacher’s compliance regarding the creation of a positive learning environment, “a learning space.” This is the first performance standard that gets assessed annually in South African schools when the teachers’ yearly IQMS assessment is done. The use of the word “we” and the transformational approach of “offering her advice and support, and trying to stimulate her intellectually” puts this principal in a unique transformational leadership category. His encouragement is also motivational by nature, and this he does by trying to eliminate fear. Principal PP encouraged teacher X further by saying:
“I told her today, please do me a favour … just go look at another more or less the same classroom … you don’t have to change anything … just go and look and see how others are doing it ...”

Principal PP says that at his school the teachers encourage and advise one another on how to create a beautiful and inspirational classroom atmosphere:

“We have such beautiful classrooms in our school … it’s unbelievable … they all look different … they reflect what the teachers stand for.”

Allowing teachers to reflect their own personalities and approaches in the way they arrange and decorate their classrooms encourages a sense of professional ownership. One can surmise that if a teacher is seen to enjoy and take pride in his or her own space, the learners in that space are likely to respond in kind.

While doing the observations, I realized how beautiful these classrooms actually were. I thought to myself that it must be a real pleasure to be a learner in one of those classrooms. Principal PP’s transformational leadership style would have been instrumental in the creation of these inviting classrooms. He encourages his staff to continuously consider modifying or upgrading their classrooms. He expects them to have their classroom repainted every three to five years. Each classroom is decorated according to the stage of the learners’ development, reflects the teachers own personality and subject being taught, is beautifully decorated by means of high quality diagrams and child appropriate pictures on the walls, and the windows are covered by attractive colourful curtains. Each teacher is responsible for decorating his or her own classroom, and is allowed to use individual initiative in deciding how it should look,
before the actual physical painting is done by the general workers in the school’s employ. As principal PP says about the classrooms in his school:

“… it is a beautiful place to be in …”

Plato acknowledges this and stated many years ago that:

“… education should take place amidst beauty …”

The three principals are well-read, have stayed up to date with the latest innovations in education by attending national and international conferences, and in doing so have had time to reflect on the changes that are taking place in schools worldwide. So when it came to planning, implementing and changing the unproductive classroom spaces into productive technologically advanced spaces, the process thereof happened more smoothly than normally happens. They started off by transforming the “old” 20th century teaching classrooms into 21st century learning spaces, by ensuring the necessary technological hardware and cabling was done to support the interactive whiteboards, computers, and data-projectors that were installed in the various classrooms. They also made sure that the computer software was up to date so that their ICT programmes could successfully accommodate and integrate with the school’s curriculum. Free-standing tables and chairs were introduced as these can be arranged to accommodate group conversations or activities. Such flexibility of the physical infrastructure is in keeping with the flexibility of technology-aided learning.

Although the classrooms are a given size, principals noted that the staff members are starting to use the learning spaces differently. Principal IH says:

“We are probably stuck in the paradigm of a classroom that can take 25/30 children. One of the shifts at my school, however, has been not to have fixed desks but to have tables that can be moved around depending on whether it’s a group activity or not. But certainly in terms of the ICT, I think the learning space is meant to be differently conceived as to a normal classroom. And I don’t think we’ve really grasped that yet. Maybe the classrooms of the future are more like the space of 2 or 3 classrooms. Maybe you can open the internal walls and you
can bring classes together for collective activities and then you can separate them out ... I would want to understand or think about what a 21st century learning space is, because as I understand it it’s more of a multi-functional space ... and this kind of research commons [where the focus group was being held at Stellenbosch University] is more of a 21st century space, it’s got bigger single units ... I need more time to think about it ..."

All three schools have integrated ICT (computers, data projectors, interactive whiteboards, latest software, and the use of the internet) with their curriculum, and in this transformed space the ICT system complements the lessons the teachers present, which also contributes towards the good academic results these schools receive. Principal IH says this of ICT at his school:

“I have become very interested in and make use of the mobile nature of ICT ... I think is very much part of the 21st century ... the concept of blended learning ... where you may be teaching but your students have access to the Internet while you’re teaching as well. So you refer to something and you ask them to look it up up on a website ... and this while you’re talking. They are looking at the website and make their own thoughts ... while they are not making eye contact with you. And I think the future classroom has quite significant implications for teaching and group dynamics. If the technology is actually going to become almost parallel with the teacher in terms of accessing information, the old-fashioned idea of making eye contact between the teacher and the student, which I happen to believe in ... I think it is going to be challenged in this new kind of classroom ... where you are looking at a tablet or a computer that’s online ... and you’re listening to the teacher talking. So if I speak for myself, I think we are only just beginning to really understand the challenges that are lying ahead for learning and teaching ... I think that ICT is going to seriously change the way we teach ...”

As principal IH realises, it is not only going to change how teachers teach and learners learn, ICT is also going to change the physical perceived classroom space, project a notion of learning that is much more flexible, multi-layered and dynamic than before, and together transform the embodied social space of learners and teachers.
Of the three principals, principal IH was the most concerned about the future. Especially under his watch as principal, he wants his school to equip the learners for the future. Although the school is producing sterling results, I picked up a sense of uneasiness when the topic of 21st century learning spaces and teaching was being discussed. He wanted his school to stay competitive, uphold the school’s culture and ethos, but also embrace the challenges that were facing all schools within the global arena. However, of the three schools in this study, principal IH’s school is the most advanced regarding the actual implementation of ICT:

“We have started thinking about using the tablet - which is a more mobile form of learning. We’ve just put in wireless receivers around the campus and we’ve sponsored all our teachers … those who want to buy iPads. We encourage our students to use their mobiles (“cell-phones”) to read the daily notice, to receive e-mails. There are some teachers who use Facebook as a means of teaching. That doesn’t require the walls of a classroom or a classroom space.”

The importance and urgency that these three principals bring to their approach to the construction and production of 21st century learning spaces will not just motivate the teachers and learners but will in turn empower the learners with the necessary knowledge and ICT skills and equip them to be competitive global citizens.

During the focus group meetings and observations that followed, the most important physical and conceived spaces that the three schools’ principals highlighted were the embodied learning spaces. Whether it is an indoor classroom or outdoor classroom, it remains important to them: As principal PH commented:

“I don’t mind where they are taught, it can be in a classroom … it can be outside … it can be under a tree … in the garden … as long as they get taught in a place … and get taught properly!”
At all three schools, the principals built outdoor learning spaces, some under trees, another under a shade cloth supported by a metal structure, and another under a constructed thatched roof structure. The use of the outdoor spaces as playgrounds at the three schools changed, because the mental spaces at these three schools had also changed to conceptualise learning environments in much more flexible, versatile and multi-use terms.

Outdoors became a conceived space where not just the learners wanted to be, but also the teachers. These shared spaces create energy, generating motivation so that learners looked forward to going out “to be taught in the open”. It was apparent that the teachers have discovered that they can use these physical spaces to act as a motivational tool and incentive that leads to good behaviour and good educational outcomes at the schools.

Of the three principals, principal PP was the least patient about bringing in the changes, and on being appointed principal started revamping his school immediately. What amazed me most, was that he came from a very small “two-man” farm school, situated in a deep rural area of our country, and was appointed principal of a top school, in one of the country’s major and fast moving academic towns. Those who had appointed him obviously noticed the wealth of talent that he was going to bring to his new school. When he became principal he demonstrated a pragmatic approach towards his school, and immediately went over to action and started to improve the perceived and conceived spaces at the school. His first approach was to make the school functional and practical. He moved the staffroom to a strategic position within the physical space of the school, then rearranged the classrooms according to the theories of Piaget (1977), which state that children create a mental framework when
they interact with their physical and social environments and should be educated in cohort groups. Principal PP therefore grouped the various classes according to different stages of development in primary education, which also coincides with the approach recommended by the Western Cape Education Department. He grouped learners in one of the following three phases that represent primary school education: Foundation Phase (Grades R to 3), Intermediate Phase (Grades 4 to 6) and Senior Phase (Grades 7 to 9).

Before completing my research, I returned to the two public schools to see if there were any other noteworthy spaces that had been produced since my first observations had been conducted there. When I arrived at the three schools construction workers were busy adding value to the schools’ infrastructure by constructing new educational or other perceived spaces.

At Principal PP’s school I observed how they were adding a whole new multifunctional section to the existing school hall. It was being built in a “non-working” or “dead” space that is situated between the hall and the administrative sections of the school, an area that no one uses. This newly constructed and produced multifunctional space will act as a large extra classroom, or a chamber choir venue or could enlarge the school hall when the sliding walls are opened up. This re-appropriated space will add value to the social space that is present at the school especially when both parents and teachers mingle after various functions.

Adjacent to this newly produced multifunctional venue, Principal PP is in the process of producing another 21st century learning space that will be supported with the latest ICT hardware and software. He has re-appropriated virtually all the non-productive
spaces into functional perceived and conceived spaces at his school. His secretary who was assisting me with entering the various spaces that I had requested to visit commented that that Principal PP loves producing space and that it makes them all feel good. Principal PP’s secretary had praise and appreciation for her principal and said:

“...I love coming to work in the morning ... I know that something new is going to happen ... something exciting ... my boss [principal PP] is always full of surprises ... he just loves to think about new spaces ... he just asks us the whole time what new spaces we want ....”

What impressed me most was that Principal was creating productive learning spaces at his school and that these educational spaces were promoting not just teacher motivation but were motivating the rest of the administrative staff and grounds men as well. Principal PP’s interest in producing space at his school has influenced his staff to such a degree that when I was doing my observations they were spontaneously using terminology that Lefebvre has used in his spatial theories. Principal PP’s secretary said this of her principal:

“... he loves producing space ... the physical spaces he produces ... takes us all forward ...”

The secretary showed me a newly produced Foundation Phase classroom where the principal had ingeniously increased the physical space by constructing a whole new deck inside the classroom just under the diagonal lofted ceiling. There are stairs that lead up to the newly installed physical space in the class. Throughout the school one notices how the perceived and conceived spaces are assisting the staff, and how happy both the teachers and learners of the school are. One senses the high levels of motivation and exceptional learner achievement that the production of effective space is bringing to the fore.

Learning and teaching is the core function of any school, and it was conspicuously clear that these three principals make sure that it remains their number one priority. These schools have built on new classrooms and changed the physical layout of
existing or given classrooms by making them more functional, inviting, and stimulating embodied social learning spaces.

6.6.3 Staffrooms and meeting spaces

In addition to effective conceived learning spaces, all three principals have placed a high premium on creating a very special space for their staff. They see the staffroom as one of the most important rooms in the school, where the staff can be motivated and become enthused. Principal PP sees the function of a staffroom:

“… so that the teachers can relax … chill and talk … and become energised.”

This led to two of them creating most inviting and functional staffrooms, that have been equipped with luxurious leather furniture, coffee machines, latest newspapers and magazines, cold water, a flat screen TV, beautiful curtains and paintings adorning the walls.

When you enter the embodied space of the new staffrooms, you do not get the feeling that you are in a school, but rather in a five star hotel. These conceived spaces, convey the message that we as a school appreciate you, and that we value your contribution that you make towards our school. Such embodied meaning contributes towards creating an environment that stimulates high teachers’ morale, high levels of motivation, and excellent learner achievements.

Having ensured that the school’s classrooms were grouped correctly and were functional in line with a 21st century learning space, Principal PP then proceeded to cater for the other needs at the school as follows:
“You first need to decide between what is a necessity, and then what is a nice to have … that is the difference … At first, I put all the nice to haves completely to one side … I then identified what the most important things were that had to be done … and made sure that they were done properly and that they were in place … Once we had done that … we started with doing the nice to haves …”

He proceeded to re-appropriate various rooms according to functionality, viz. the new staff room, a duplicating room, a teachers’ workroom, offices for his teachers according to seniority, centralized sport and cultural offices, and as he says:

“to make everything practical and streamlined … so that it works for us … for example, we moved the staffroom to the most beautiful place in the school … it has the most beautiful views overlooking the mountains … it is spacious … we equipped it with beautiful leather furniture … we gave the teachers their own kitchen and a flat screen TV … we did not hold back when it came to the costs … it makes a difference … it motivates the teacher!”

When I entered principal PP’s staffroom for the first time, I could not believe what I was seeing. The perceived and conceived spaces were beautifully and stylishly decorated and equipped. Principal PP’s actions do not just care for the physical and mental needs of his staff, but send out a very strong message that he cares for them, honours and values them as teachers. The comfort and support that the staffroom gives the teachers, motivates and revitalizes them with the necessary mental and physical energy to carry on with their task of teaching the learners.

On the first day of doing observations at principal PP’s school, I saw how much passion and commitment the school’s PTA were putting into a celebratory feast that was to take place in the staffroom that afternoon. Firstly, the parents wanted to thank the teachers and staff for a job well done during the term, and secondly the school was honouring and congratulating its deputy principal who had been promoted to principal at another top academic school in the province.
They had prepared one long table, beautifully laid and decorated with lovely flowers and gifts. In addition to embodying space to show collective appreciation, this exercise could not fail to inspire others to follow suit. As principal PP stated:

“My school’s success is not just determined by our learners’ successes, it is determined by how many teachers … I can equip to move up into promotion posts [referring to their deputy that was promoted to principal]… it’s my and our school’s contribution towards education.”

In addition to the various staffrooms, the teachers at the three schools have been given their own administrative section, where they can meet, share and discuss their work. This administrative section has its own fridge and facilities to make coffee or tea. Creating such a working space both encourages and acknowledges the teachers as professionals worthy of their own professional space.

Principal IH’s school had inherited such a centre when he became principal, but principals PP and PH constructed new teacher workrooms or teacher administrative sections from scratch. Principal PP re-appropriated an old classroom and a small storeroom, knocked out the outside walls and constructed a new ICT laboratory and teachers’ workroom, which is called “Carpe Diem.” Principal PP equipped his teachers’ workroom with specially designed orthopaedic chairs which support the teachers’ lower back while working long hours. His action sends out a strong message that Principal PP cares for his staff.
Principal PH, however, saw the need for his teachers to have their own workroom in a quiet section of the school where the teachers could do their confidential work. When a venue was not available principal PH re-appropriated a storeroom and a part of a passage leading to the staffroom, secured a working surface against the wall, and equipped it with computers and hardware to support the various computer stations. He did it on a much smaller scale, but in both instances, the use of the conceived spaces changed dramatically and so too the productivity of the staff members involved. These re-appropriated “dead” or “non-working” spaces became effective and vibrant teachers’ workrooms. What transpired while doing the observations at the schools of these three transformational leaders is that their ability to think analytically, laterally and creatively was clearly and actively applied when producing space at their schools. They mainly succeed with their projects and their constituents sense their success, passion and commitment, a powerful combination which leads to higher levels of energy and motivation.

6.6.4 School grounds

Although principal PH is a humble person, his pragmatist’s approach towards his task as a school leader, in which he musters support from his staff, learners and parents, in constructing hard facts (physical environment etc.) which he uses to influence the soft facts (beliefs etc.) at his school, is one of the reasons why he can achieve his aims. He is continuously improving the physical spaces, in order to create new mental spaces that have become powerful symbolic tools of inclusion and the representational or lived spaces that energize and motivate his learners and staff. On the far side of the school, principal PH had constructed a memorial garden, which is a
beautifully laid-out garden dominated by a high wall with the name “memorial garden” inscribed on a name board.

Not only does this memorial garden embody meaning and express the value of honouring those who have died, it also signals that the school is seen as a very special place where people choose to be remembered. The principal’s approach sends out a powerful message that the principal cares, is in charge, and communicates what the school stands for.

Throughout the school grounds shaded seating areas have been or are being built. Principal PH has built up a good working relationship with his School’s Governing Body, and they enthusiastically support his idea of transforming the various spaces at the school. They have become actively involved in a number of spatial projects, and Principal PH shared the following:

“The School’s Governing Body asked one of its members (an architect) to design additional emotional spaces at the school, so that learners can sit and share their thoughts and moments with one another.”

On all the playgrounds of these three schools, the principals have produced social zones that accommodate the learners so that they can meet and have a chat. These zones are seen as safe zones. Principal PH demonstrated true initiative and built a number of social or what he called “emotional” zones around his school. Each zone has around 6 to 10 seats, where the learners can sit and share their thoughts. What I found most interesting at principal PH’s school was that one of these newly constructed emotional zones did not cost his school a cent.
Principal PH instructed a tree feller who was pruning the trees, to saw the tree’s branches off in certain lengths. These tree stumps, are arranged in groups, and have become the “furniture” for the seating arrangements of a newly constructed conversation zone under the trees. The learners come and sit there during breaks or even after school. It is a lovely shady and cool spot, especially during the warm summer days, and has brought a new social dimension to the school. Learners want to feel that they belong and that the school cares for them. With this in mind the new conceived space has become a lived space during breaks and after school. Principal IH said this about the social zones in his school:

“I think our newly constructed spaces … create the idea that schools are places of conversation … where there is that continual interaction … and the creation of new knowledge.”

At principal PP’s school he has re-appropriated a number of “dead” spaces at his school and has converted them into embodied social spaces with energy and excitement. At each of the three schools entertainment areas (braai areas) have been built where learners, teachers and parents gather together in order to celebrate or to socialise. These have added a new dimension to the school and become gathering places where the users meet to socialise, share their thoughts about the school and its future, and strengthen the notion of community. The feeling of belonging that users of these social or lived spaces experience adds value to the school because the users
perceive that their contributions are appreciated and they reciprocate with enhanced levels of school contribution.

Principal IH realises the importance of the interaction between the perceived, conceived and lived spaces to form meaningful embodied spaces. He affirms that by changing the use of the various spaces, he was able to change the atmosphere at the school, improve the discipline, enhance learner achievement and raise levels of belonging and cooperation. Principal IH used space to achieve the goals he has set out for his school and says:

“You should use space to foster … your rituals, symbols and traditions and school spirit … school spirit is something very intangible … you cannot just quantify it. Those rituals are what you do regularly, so the big events of the week that happen regularly, in our case, raising the school flag, assembly or chapel service … the staff meeting: we have a weekly hour long staff meeting that takes place. And the symbols, we did a whole exercise last year looking at our vision and mission and how we might refresh our understanding of that. And that for me is fed into social spaces because …it is identity and belonging … and what does our school motto mean and inculcate that in the teacher’s sense of what it means to work at the school? So for me this is a very big area, and then it goes down to … last Friday we also arranged a staff braai that just boosted the spirit. So it is from actual social events to these much bigger questions of belonging and ritual and all of that …”
Principal PP agreed with principal IH, that when you change the physical and conceived spaces at the school, you change the use of that space, and that leads to a change in behaviour within that space. Principal PP says that the principals should be careful when changing the conceived spaces at school and should consider the following:

“Schools should make use of values and symbols in the various spaces at school ... they are powerful ... values are the most important ... because as I see it ... schools should promote values. We’ve got 6 values and it’s displayed all over the place in our school. We really like the children to live those values. That is something that is so important in schools today, the badge ... the colours ... the flag ... the academics ... it is all important ... that’s why there is a school ...”

Principal IH agrees with Principal PP and stresses the important role the conceived spaces play at a school, in establishing order, discipline, and ensuring that learners are well behaved and able to conduct themselves well in public. Principal IH suggests that, by changing the use of space at school in a fruitful manner, it could also benefit the parents in their parenting role. Principal IH says:

“I think there is a gap between what the school stands for ... and what the home stands for ... we need everyone to buy-in for what we as school stand for. It starts with the schools symbols and rituals. They must be proud of their school.”

Throughout the school grounds it became evident that Principal PP was re-appropriating non-working spaces into functional spaces that could assist the teachers in performing their duties more effectively. In other non-working spaces on the school grounds he has produced a number of emotional zones where learners can sit and chat with one another and experience closeness and togetherness. In the Foundation Phase quad Principal PP has built a wooden storage
room beneath a tree that is central to the number of classrooms that lead out into this non-working area. It is evident that these newly produced perceived and conceived functional spaces make the teachers teaching tasks that much easier, because their teaching aids and apparatus are stored centrally, and it seems that by having their teaching aids and apparatus handy, enhances the teachers' moods and functionality.

In another section of the school Principal PP has created a new lived space where the learners gather, are energized and play together.

School PP: “Re-appropriated “non-working” or “dead” spaces that have become lived spaces where learners socialise and play.

He produced this social space, by re-appropriating a section of unused tarmac and painting “snakes and ladders”, “hop-scotch” and other mathematical games on it, as well as constructing a large variety of jungle gyms for the learners to play on. It would be interesting to find out to what degree these newly produced social and learning spaces contribute towards learner achievement and both teacher and learner motivation.

In doing the focus group interviews with the three principals, and doing observations at their schools, I have seen how Lefebvre’s three different spaces (“triad”) interrelate with one another, yet are distinct from one another. When Lefebvre said that space is unfinished, since it is continuously produced, and it is always bound up with time (Lefebvre, 1991), I could see during my observations how the principals are continuously producing space, and how the results thereof are benefitting their school communities. At all three schools, the new physical spaces and re-conceived mental spaces have created new embodied social spaces.
6.7 The reaction and emotive responses of users to the new lived spaces

In this section I look at the emotive responses to the new produced spaces. In constructing or transforming the physical and mental spaces at the schools, the principals changed the lived spaces as well. This led to a change in culture at the schools. The first impression of the newly produced spaces was a resounding “wow” by the various users. They could sense that more than just a physical change was taking place at the school, but that the school’s culture would be changing as well. By upgrading the entrances to the schools, the gardens, the water features, signposting the route to the various sections of the school, making the foyer inviting, the school was sending out a strong signal about what it stands for, and was influencing the users of the lived spaces in a positive manner. As principal PP stated:

“Before we changed the space ... parents were continuously angry with one another ... some cars actually bumped one another ... but when we paved that space ... made it nice ... it did not even cost us much money ... they are now actually smiling when they load their children off in the mornings ... or when they fetch them in the afternoons. It is magic! All we did was to change the physical space ... it has become a social space ... where parents are talking to each other again ... they are happy, their children are safe ... and they are now talking to one another again!”

The changes that were made to the learning spaces such as the classrooms, indoors as well as outdoors, brought about a renewed academic energy throughout the school. This did not just influence the learners positively, but affected the teachers as well.

Principal PP said of the newly produced administrative area for teachers:

“The teachers would come back and say ‘wow’ this is nice ... they would feel good ... and the kids would like it. They all started working much harder ... they
like to go and work there … there is always a buzz. You can’t work in a place that is not nice. So that was an example to change to better. Really … now they go there and like to work there … they talk… we put in a bigger table … so they can all sit around and they can talk and work… everything is there. I think it is a more popular place than the staff room … they like being there.”

Each school infused the school’s lived space with symbols, values, logos, etc., made the high frequency areas user-friendly by ensuring these were neat and newly painted (where necessary), that attractive paintings were hung up, learners’ achievements displayed throughout the school. This all led to a change in behaviour by the users of the lived or social space. The three principals reported a marked improvement of learner behaviour, a drop in bullying at the schools, better discipline and co-operation amongst the learners. Principal PH, the only principal who made use of colour to affect the mood or behaviour of the learners said:

“Corridors can become a battlefield, but since we have re-painted ours … and decorated them … it has become a better place … the learners meet and chat with one another … and there are no more problems …”

Principal PH plays classical music throughout his school in open areas during the day as well, which could possibly have a calming effect on the learners. This could be one of the reasons why the learner behaviour and discipline is good. Throughout all three school participating in this study motivational messages are displayed in their corridors as well.
Principal PP makes use of colour for decoration and for mood effect, and has painted the corridors and classroom spaces at his school, and has commented on how the users in the lived spaces experience a “wow” moment when they see a newly painted area of the school for example, just after a holiday. Principal PP uses colour, values and symbols throughout his school, to positively influence the attitude and mood of the users and says:

“I use colour … we paint the school … use the flag and logos … make the school a special place … make it a place where people are happy and feel where they belong. It gives them energy!”

At all three schools, emotional “safe” zones have been built, and are used by the learners as “chill-out” spaces at the school. These emotional zones have been variously constructed, for example, as a neat seating arrangement under shady trees, or under a thatched roof structure, or an area covered by shade cloth. With individual seating arrangements, these spaces are away from the hustle and bustle of the normal playground and its noise. It is a place where the learners go and have a quiet moment, or talk quietly in pairs. Principal PH says that he hopes these new spaces at his school have the following effect on the learners:

“I hope that the atmosphere it creates … becomes a space (lived space) where the learners want to go to … to get a feeling of self-worth, confidence and hope … that it will help them to start believing in themselves … an atmosphere of
The three principals value these emotional zones on the playgrounds very highly, because this feature also has an influence on the general behaviour of the learners at the school. For example, this type of zone is a place where the learners can go after a stressful period at school, and as principal PH says:

“Recharge their batteries … talk about life … help each other. The kids of today have many problems, so it is a place where they give each other advice and possible answers …”

By producing new physical and conceived spaces at their schools the three principals influenced how the users think about and respond to the spaces. Hopefully this will lead the users to experience the embodied space as inspirational and motivational. Principal IH sees it as follows:

“By constructing new space at school … you send out a strong message that you care about the people who work and study there in that space … and that you take care of the various spaces as well. So it’s in showing an interest in somebody that you value them and showing an interest in how the school looks, you are valuing the people who work at the school and who come and study there. That is a general point that I am taking away from this, is that taking care liberates people to perform and to grow …”

In this chapter, I have tried to highlight the dynamic interplay between spaces, action and meanings. By constructing new spaces and re-appropriating dead spaces at a school, a transformational school leader sends out a message of renewal, which could stimulate analytical, lateral and creative thinking and encourage buy-in and participation. This message furthermore leads inexorably to new levels of inspiration and motivation. When this is achieved within a lived space, the end result is hopefully marked most of all in the improved personal development and achievement of the learners – the chief goal of education.
CHAPTER 7
SYNTHESIS AND A SUGGESTED WAY FORWARD

7.1 Introduction

In one sense, this thesis was a response to the evidence that many schools in South Africa are not functioning effectively, teachers are becoming demotivated, space is not being used effectively, and learner achievement is on the decline. However, there are also many schools that are well-led with motivated teachers and have created innovative and creative spaces. The key questions that need to be answered are: Why the stark differences? Why are some schools successful at producing and re-appropriating spaces and others not? How did certain schools get the buy-in of their constituents and others not?

There is a general perception in education that a person who is appointed a school principal is seen in a school community as a school leader. This research looks at three principals who seem to have been effective school leaders and tries to find out how they re-shaped their schools, in other words to inspect the substance of their leadership expressed in practical decisions and action.

The literature indicates that the producers of space influence the behaviour and actions of the humans within that space and that such behaviour, in turn, has a significant effect on the results that are achieved in that space. According to HEFCE (2006) the thing to do is to change the environment and people will change themselves” (HEFCE, 2006). The effect that well-produced space has on humans ranges from better health, improved behaviour and discipline, less crime, enhanced creativity, better scholastic results (CABE, 2002), and, as this research has also shown, enhanced levels of motivation and work commitment.

7.2 The research findings

This study finds that the three principals instinctively followed a transformational leadership style and constructed or produced new spaces at their schools which seem to have motivated both teachers and learners. My analysis of their innovative use of space may contribute to the explanation of these schools’ successes in their learner performances.
The following are the main findings of this study on the dynamic relationships between spaces, actions and meanings:

- The three transformational school leaders are continuously exploring ways and means of improving the physical (perceived) spaces and mental (conceived) spaces, at their schools and thus embedding them in new social (lived) spaces. They use the newly constructed spaces (i.e. ICT supported classrooms, staffrooms, teacher workrooms, reception areas, playground and emotional zones) to improve the well-being of the users thereof, as well as using these changes to motivate both teachers and learners in order to improve their practices, and to encourage better learner results.

- The three transformational school leaders understand the role of space in the dynamics of creating more productive educational spaces and educational communities. They are acutely aware of how the triad of spaces, e.g. the spatial practices, representation of spaces and representational spaces, influence one another and the effect such space has on those occupying it within a school environment.

- It is through their leadership (transformational leadership), rather than their management, that the spaces at the schools could be negotiated, produced or re-appropriated, and that the principals’ space strategy and the strategic implications of the use of space are understood within a school. Their effective transformational leadership, as opposed to management, is therefore able to adjust the constituents’ (learners, teachers and parents) attitude and support, and so to create alignment for the successful production of space at school level. The new, embodied spaces are thus co-produced and co-owned, giving rise to new shared meanings and uses.

- Through promoting physical spaces that enable professional interaction with their colleagues (such as conducive staffrooms and administrative conference blocks), these transformational leaders encourage their teachers to challenge their own beliefs, attitudes and values and in so doing the teachers develop professional skills that embrace the vision mission and goals of the school.
This, in turn, is linked to higher levels of motivation and confidence, better educational practices and commitment, and better academic results from the learners.

- It is evident from the school results and the palpable atmosphere of collegiality and commitment that the three transformational school leaders are effective and successful and run their schools well. They achieve success through their leadership influence. They have the ability to get their staff members to buy in to new projects, and so to do much more than they were expected to do. The principals did this by creating persuasive visions of the future, negotiating shared goals, modelling the desired behaviour, demonstrating high performance expectations, offering individualised support to their teachers, creating structures at the schools that encourage staff members to participate in school decision making, and inspiring their teachers by means of intellectual stimulation. And to encourage these outcomes all three principals produced supportive spaces that are embodied in the vibrant lived space that I observed when visiting the schools.

- The three transformational school leaders are skilled at keeping their schools’ ethos, values and beliefs alive by physically promoting their schools’ symbols, codes, flags, logos, badges, colours, which are displayed around the school and embodied in rituals. In doing so, the three schools send out a strong message of belonging, pride, unity and esprit de corps.

- Allowing each teacher to choose the colour of his or her own classroom engenders a sense of ownership for the teacher and interesting variety for the learners. One of the principals used colour and classical music in the production of spaces at his school in order to create aesthetically attractive classrooms and an atmosphere of tranquillity or calm, which he says has led to improved behaviour and discipline, and better academic results at the school.

- The three principals give regular acknowledgement for good work done, and arrange special occasions (shared spaces) where they celebrate good results. In addition to recognising and thanking their staff members, the three principals
ensure that staff members are rewarded with an honorarium or another financial benefit. By receiving regular feedback on their learners’ results, including how their superior sees their work, by getting acknowledgement (both verbally and financially), and by being able to work in an evolving physical and mental learning space, these teachers remain intrinsically motivated, as their various needs are addressed. Through arranging special lunches for teachers, giving rewards where due, and creating meeting rooms for teachers, these leaders strengthen the professional identity of their teachers.

- The three transformational school leaders are in tune with their own needs and the needs of those around them. They are skilled in motivating their teachers and therefore getting the best out of them. The three principals are self-driven and highly motivated themselves, yet realise that they will not be able to achieve their aims on their own, and need the on-going engagement and support from their constituents, before announcing and initiating a proposed spatial project. The principals are astute strategists and wait for the right moment to propose their plans regarding the production or re-appropriation of space. They take cognisance of their staff members’ moods, attitudes and levels of motivation. They do this to ensure that a fully committed staff embraces and takes ownership of a new project collectively. When the teachers are under severe pressure or have a high workload (such as at the end of a semester), the leader holds back and does not propose possible (spatial) plans or further work that needs to be done. Instead, these leaders suggest plans for change at times when teachers feel energized, such as after a holiday. This lessens the levels of stress at the workplace, and leads to excellent buy-in by all the constituents.

- I observed how the three transformational school leaders drive themselves, are result driven, and need continuously to assess and produce new perceived, conceived and lived spaces at their schools. They use the various forms of space as tools to achieve their aims (e.g. transformed the classroom spaces, staffroom, teachers’ administrative section, outdoor spaces, reception and administrative sections of the school). They are acutely aware that to achieve their aims, the spaces need to be conducive to the enhancement human use
(i.e. they made the school more functional and appealing, for example by centralising classrooms and staffroom and beautifying these spaces) in order to bring out the best in both learners and teachers and so that these can be used (by appealing aesthetically and practically to the users) to improve the mental well-being and motivation of the users of the space.

- Transformational school leaders, have the learners’ interest at heart, and do not erect boundaries in the spaces at their schools. They are child centred, and create a feeling that “every child is a winner” and that their schools’ produce “happy children”. They have removed fear through beautifully decorated inviting schools. Other than for relevant practical reasons, they do not ban learners from certain areas in the schools, and encourage the learners to make the school their own, where they feel they belong. For the learners to experience this, they have “opened-up” certain areas of the school for the learners, made these child-friendly, and have constructed emotional zones (safe spaces) around the school where the learners can meet and talk in private if needed.

- Two of the school leaders are aware of the principles of the Sigmoid Curve, that implies that all living things, organisations, civilizations go through four stages, namely (a) inception, (b) growth, (c) maturity and (d) decline (Handy, 1994). They keep this in mind knowing that they continuously need to consider new options or opportunities of how and when to start improving or changing things at their schools, and that such initiatives should take place when the school is doing well or is excelling.

- By producing and re-appropriating space to create a better work environment for their teachers, the three transformational school leaders demonstrated that they care about their colleagues’ work conditions and about them as teachers as well. These actions lead towards improved working relationships that are built on trust and understanding. The principals create decision-making structures wherein the colleagues are encouraged to participate, and they discuss contributions towards the production or re-appropriation of effective educational spaces. In the atmosphere of trust and respect that follows, the transformational leaders do not hesitate to speak their minds and give advice or
recommendations of what can be improved at the school, nor do they hesitate to receive and accept criticism from their school's constituents.

7.3 Limitations of the research

The pragmatic nature of this research suggests a specific richness of how leadership, space and motivation inform and relate to each other. Yet the links are complex, dynamic and difficult to isolate. Spatial theory, leadership and motivational theory are interwoven at different levels throughout this research, and given the scope of the thesis, I have linked them without pursuing an in-depth discussion of each one.

Caution is needed to guard against the simplistic notion that principals alone can produce or construct space. A principal cannot act alone, and requires the support of his or her constituents, viz. the learners, teachers, parents, and especially the support of the school's Governing Body. The decisions that the SGBs make are backed by a number of provisions in the South African Schools' Acts, and SGBs have the power to nullify any recommendation or suggestion that a principal makes, should they not support it. It is therefore up to the principal's own leadership skills and his or her ability to influence the SGB to win support for strategies and decisions that the leader believes can make the difference.

I further acknowledge limitations with reference to my sampling strategy that resulted in the choice of the three school leaders chosen due to their proximity. The sample does, however, reflect both public and independent schools, as well as primary schools and high schools. Generalising findings is problematic as my findings do not apply to all schools in this specific education district. I clearly understand that my chosen methodology seeks to understand the actions and experiences of three school leaders within their particular school context. Although the findings are applicable only to the schools that form part of this study, I want to suggest that other schools can learn from these principals' stories.

A larger sample size of participants would add value and greater depth to this kind of research, where the focus is on analysing space, leadership, motivation and learner achievement. However, due to the limit of this study it was not feasible to increase the
sample size. The purpose of this research was, however, not to produce a set of findings from which generalisations could be generated.

7.4 Suggestions for future research

In the light of the research done, I wish to make the following recommendations:

- This study recommends that more research be done on the link between transformational leadership, the construction of effective space and teacher motivation. This study suggests that the development of such spaces may lead to improved discipline and improved academic results.

- During the interviews, the focus group meetings and the observations, the three principals collectively agreed on the importance of choosing the appropriate colour to paint classrooms, corridors, the staffroom and school foyer, in order to create a specific atmosphere, and eliciting specific behaviour. In addition, one principal plays classical music, with the purpose of keeping the learners calm, disciplined and well-mannered. This research recommends that a study should be done to examine the effect that the use of appropriate colour and sound have on both learners and teachers in the physical spaces and mental spaces at a school, in order to motivate users and encourage good results.

- This research recommends that further studies should be done on the impact of existing and experimental spaces on learning in a South African context. The focus should be on the effects the perceived spaces and conceived spaces embedded in the lived spaces at a school have on learning. There is a need to do context-specific research, especially on the influence of the physical environment on creativity, attention, and critical thinking, as well as a need to do applied research on the effect that lighting, ventilation, and furniture have on learner achievement.

- As was evident in school IH, the technologically wired and advanced classroom engaged the learners in an energetic way. As we move rapidly forwards a technology-driven globalized world, studies need to focus on how learning can
best be facilitated by technology and how existing classroom spaces can be re-appropriated to make 21\textsuperscript{st} century learning experiences possible.

- This study identified that the three principals in this study, at whose schools extra-ordinary achievements have been recorded and who are all actively involved in constructing or producing space at their schools, have a natural transformational leadership style. This study recommends that a comparative study should be done, to ascertain what the typical leadership styles are of school principals in the public sector, as well as in the independent sector, and measure these against the schools’ successes and the creation of space and teacher motivation, to establish the nature of the correlation.

- This study recommends that the developers of the leadership training programmes in the Western Cape Education Department, presented at the Cape Town Leadership Institute, and elsewhere should consider including transformational leadership training in the courses they present.

7.5 Conclusion

The study set out to explore how school principals negotiate space at their schools, in order to find ways of motivating their teachers and learners, and to examine whether this could lead to improved academic results. I have to be honest and admit that, within the limitations of time, resources and sample size, I believe this research has managed only to ask opening questions about school spaces, introduce some provocative questions about transformational leadership and the uses of school space, and set an agenda for more probing investigation. To an extent, therefore, I believe that the study fell short of my initial expectations and intentions. This complex research topic deserves much more extensive research.

I have no doubt, however, that the three schools I visited yielded inspirational insights into the powerful impact that transformational leadership from the principal can have on a whole school community, even by narrowing the focus of research on the dimension of spatial arrangements only. Methodologically, these fruitful insights about institutional leadership were made possible through using the lenses offered by
Lefebvre’s triad of spaces, an approach that I feel committed to investigate further in my professional practice as a mentor and manager of schools and their principals.
REFERENCES


CABE. (2002). The value of good design: How buildings and spaces create economic and social value: Commission for Architecture & the Built Environment. [Internet]. Available:


APPENDICES

APPENDIX A: Focus group questions 195
APPENDIX B: Observation template 198
APPENDIX C: Research approval letter Western Cape Education Department 201
APPENDIX D: Letter of ethics clearance University of Stellenbosch 202

GRAPHS

Graph 1: Sigmoid Curve 44
Graph 2: Sigmoid Curves in action: 45
APPENDIX A

FOCUS GROUP QUESTIONS

The main research question: “How do school leaders negotiate space in order to motivate teachers?”

A. Background details (from each of the three interviewees)

1. For how long have you been teaching?
2. For how long have you been in the current school?
3. What leadership position do you occupy?
4. As a leader, what do you see as your main tasks?
5. How far, would you say, does the influence of your principalship penetrate? (e.g. does it end at your office door? the foyer? the corridor? at the teachers door? or inside the classroom?)
6. How many learners and teachers are enrolled at your school?
7. How would you rate the socio-economic status of the community which your school services?

B. Considerations about physical space (questions put to the whole focus group)

1. What would you say are the most important physical spaces in your school?
2. Were you satisfied with the condition and layout of the physical spaces when you became principal of your present school? What did you perceive to be the main problems with the physical spaces?
3. If you were, or even if you were not satisfied with the spaces at your school, what did you do?
4. If you changed or modified the given spaces, what were your intentions? What were your aims?
5. Did you involve teachers, learners and parents in your reconfiguration of the physical spaces? If so, how? If not, why not?

6. What were the main challenges in modifying the spaces?

7. What were the reactions of the people using the spaces after the changes?

8. If constructed or given, would your educators be able to adapt to a new “21st Century” learning space which incorporates ICT, or would they rather prefer continue teaching in a “20th Century” learning space, to which they might be accustomed?

C. Social spaces

1. What do you think constitutes the “social” spaces in your school?

2. What are the main rituals, symbols and traditions that foster a school spirit?

3. Have you changed anything to improve the school spirit and social interactions between and among teachers, learners and parents?

4. If so, what did you see as the problem that needed to be solved?

5. How did you go about negotiating the changes of these social spaces?

6. What were the main challenges in changing these spaces?

7. What have been the responses of the teachers, learners and parents to these changes? Is there a different “emotional” atmosphere?

D. Professional spaces

1. As a leader, what kinds of opportunities do you (or would you like to) create for your teachers to develop professionally?

2. How did you negotiate creating these opportunities and motivating teachers to use them?

3. What were the main challenges in negotiating these spaces?

4. What have been the reactions of the teachers, learners and parents, and the outcomes of these changes?
E. General

1. What would you count as your main achievement in making the “lived spaces” of your school more productive?
2. If you could change anything now, what would it be? Why? How?
3. How do you, as principal, stimulate your educators intellectually? Do you encourage them to question their own beliefs, assumptions and values? Have your educators an enhanced ability in solving problems? Give reasons.
4. What would be your advice to other school leaders who want to improve the lived spaces in their schools?
5. Is there anything else you would like to add?
### APPENDIX B

Observation template:

<table>
<thead>
<tr>
<th>Space</th>
<th>Perceived space:</th>
<th>Conceived space</th>
<th>Lived space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Roominess</td>
<td>Aesthetics &amp; displays</td>
<td>Ease of movement</td>
</tr>
<tr>
<td>School grounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foyer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reception</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal's office</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff room</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classrooms – layout,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seating, ITC, displays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>media room</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning space</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playground</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service areas – kitchen,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>print room, toilets</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conceived space:
- Is there enough room for the purpose for which the space is intended?
- Is it attractive and inviting? (What makes it so? What building materials are used? What colour?)
- Does the overall layout facilitate movement between spaces?
- Is it safe?

Perceived space:
- What symbols are displayed? What effect does this have with regards to user’s responses? Do the symbols exclude anyone?
- What message is portrayed by the space?
- Is the purpose of the space clearly communicated? (e.g. school hall for gatherings)
- Who “owns” the space?
- How does the space regulate movement and use of the space?

Lived spaces:
- Degree of social interaction
- Do users use the space for which it is intended?
- How do they actually use the space
APPENDIX C

REFERENCES:

ENQUIRIES:  Dr A T Wyngaard

Mr Johann Burger
IMG Manager
Cape WInelands

Dear Mr Johann Burger

RESEARCH PROPOSAL: HOW SCHOOL LEADERS NEGOTIATE SPACE TO MOTIVATE TEACHERS

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Approval for projects should be confirmed by the District Director of the schools where the project will be conducted.
5. Educators’ programmes are not to be interrupted.
6. The Study is to be conducted from 01 April 2012 till 30 May 2012
7. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
8. Should you wish to extend the period of your survey, please contact Dr A T Wyngaard at the contact numbers above quoting the reference number.
9. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
10. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
11. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
12. The Department receives a copy of the completed report/dissertation/thesis addressed to:
   The Director: Research Services
   Western Cape Education Department
   Private Bag X9114
   CAPE TOWN
   8000

We wish you success in your research.

Kind regards,
Signed: Audrey T Wyngaard
for HEAD: EDUCATION
DATE: 08 February 2012
APPENDIX D

Approval Notice
New Application

31-May-2012
BURGER, Johann Richards

Protocol #: DESC15/2012
Title: How can school leaders negotiate space in order to motivate teachers (with implication learner achievement)

Dear Mr. Johann BURGER,

The New Application received on 23-Mar-2012, was reviewed by Research Ethics Committee: Human Research (Humanities) via Committee Review procedures on 02-Apr-2012 and has been approved. Please note the following information about your approved research protocol:

Protocol Approval Period: 26-Apr-2012 - 25-Apr-2013

Present Committee Members:
Fouche, Magdalena MG
Van Wyk, Berit B
Muster, Paul PJ
Hassen, Leonard LD
De Villiers, Marc MRH
Hattangh, Johannes JP
Theron, Cef, CC
Semahalo, Nkosazana NZ
Bitzer, Elize EM
Engelbrecht, Sidney SF
Van Zyl, Gerhard G

Standard provisions:
1. The researcher will remain within the procedures and protocols indicated in the proposal, particularly in terms of any undertakings made in terms of the confidentiality of the information gathered.
2. The researcher will maintain ethical standards if there is any substantial departure from the existing proposal.
3. The researcher will remain within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field of research.
4. The researcher will consider and implement the foregoing suggestions to lower the ethical risk associated with the research.

You may commence your research with strict adherence to the above-mentioned provisions and stipulations.

Please remember to use your protocol number (DESC15/2012) on any documents or correspondence with the REC concerning your research protocol.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review:

Please note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required.

The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) number REC-050/11-032.

This committee is guided by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles, Procedures and Processes, 2014 (Department of Health).

Provincial and City of Cape Town Approval:

Please note that for research at a primary or secondary healthcare facility permission must be obtained from the relevant authorities (Western Cape Department of Health and/or City Health). To conduct the research as stated in the protocol. Contact persons are Mr. Claudette Abrahams at Western Cape Department of Health (cmabrahams@health.gov.za Tel: +27 21 403 3970) and Dr. Helene Venter at City Health (Helene.Venter@capetown.gov.za Tel: +27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant parties. For approvals from the Western Cape Education Department, contact
Dr AT Wyngaard (atwyngaard@ggc.gov.za), Tel: 021-4762272, Fax: 0865902282, http://wc.edu.wc.gov.za).

Institutional permission from academic institutions for students, staff & alumni. This institutional permission should be obtained before submitting an application for ethics clearance to the REC.

Please note that informed consent from participants can only be obtained after ethics approval has been granted. It is your responsibility as researcher to keep signed informed consent forms for inspection for the duration of the research.

We wish you the best as you conduct your research.

If you have any questions or need further help, please contact the REC office at 021/809183.

Included Documents:
DESC FORM

Sincerely,

Siyabonga Ngxokwa
REC Coordinator

Research Ethics Committee: Human Research (Humanities)
Investigator Responsibilities
Protection of Human Research Participants

Some of the responsibilities investigators have when conducting research involving human participants are listed below:

1. **Conducting the Research.** You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. **Participant Enrollment.** You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.

3. **Informed Consent.** You are responsible for obtaining and documenting effective informed consent using only the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. **Continuing Review.** The REC must review and approve all REC-approved research protocols at intervals appropriate to the degree of risk but no less than once per year. There is no grace period. Prior to the date on which the REC approval of the research expires, it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. **Amendments and Changes.** If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting materials), you must submit the amendment to the REC for review using the current Amendment Form. You may not initiate any amendments or changes to your research without first obtaining written REC review and approval. The only exception is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. **Adverse or Unanticipated Events.** Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within five (5) days of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the REC's requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. **Research Record Keeping.** You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research protocol and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC.

8. **Reports to Sponsor.** When you submit the required reports to your sponsor, you must provide a copy of that report to the REC. You may submit the report at the time of continuing REC review.

9. **Provision of Counselling or emergency support.** When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognized as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

10. **Final reports.** If you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.

11. **On-Site Evaluations, Inspections, or Audits.** If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.