

Leadership practices that contribute to the development of the school learning environment and effective teaching

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Publication Date:

2021

DOI:

https://doi.org/10.26190/unsworks/1950

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Leadership practices that contribute to the development of the school learning environment and effective teaching

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A thesis in fulfilment of the requirements for the degree of Doctor of Philosophy



School of Education
Faculty of Arts, Design & Architecture
September 2021

1. THESIS TITLE & THESIS ABSTRACT

Thesis Title

Leadership practices that contribute to the development of the school learning environment and effective teaching.

Thesis Abstract

Thesis abstract

An investigation of leadership practices, school learning environment and

effective teaching practices in independent secondary schools in Australia

Keywords: school improvement, leadership practices, school learning environment, school culture, effective teaching, student achievement

Abstract

It is generally accepted that school leaders are critical to improving schools. However, the School Effectiveness and School Improvement literature is largely inconclusive a bout how school leaders work to develop the conditions that enhance teaching to improve student outcomes. This thesis responds directly to calls in the research for more theory-driven and evidence-based models of leadership and its relationship to school improvement. Its purpose is to investigate the differential leadership practices that de velop the school learning environment and effective teaching, within a self-improving school paradigm. A conceptual framework to guide the thesis was derived from the lit erature to design an integrated, multi-level model, well suited to conducting research of this type. The addition of a faculty level in the framework facilitates an examination of the contribution of middle leaders to improving school conditions to enhance teaching.

This thesis employs a qualitative approach to achieve its research aims, including close analysis of its main underlying theoretical assumption. It comprises a multi-site cas e study of four independent, secondary schools in NSW. The research methods include semi-structured interviews as well as observation of teachers and students in their daily in school activities, along with relevant document analysis.

The findings and analysis emphasise the significance of strategic, context-specific and multi-level leadership practices implemented to make a positive difference to the sc hool learning environment and develop effective teaching. The analysis also demonstrates how leadership is mediated through people and processes at various levels of a school, a factor still largely absent from much of the research that seeks to explain the relationship between leadership and student outcomes.

These tiered leadership practices and their underlying processes form a four-factor model of school improvement – a significant contribution of this thesis. This model reve als a number of right drivers of school improvement. It offers insights for the benefit of practitioners and researchers, as they seek to further their knowledge of how school leaders improve the learning environment and teaching in a secondary school context. This theory-driven, evidence-based model represents an important contribution of this thesis to a gap in the School Effectiveness and School Improvement research base.

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Abstract

It is generally accepted that school leaders are critical to improving schools. However, the School Effectiveness and School Improvement literature is largely inconclusive about how school leaders work to develop the conditions that enhance teaching to improve student outcomes. This thesis responds directly to calls in the research for more theory-driven and evidence-based models of leadership and its relationship to school improvement. Its purpose is to investigate the differential leadership practices that develop the school learning environment and effective teaching, within a self-improving school paradigm. A conceptual framework to guide the study was derived from the literature to design an integrated, multi-level model, well suited to conducting research of this type. The addition of a faculty level in the framework facilitates an examination of the contribution of middle leaders to improving school conditions to enhance teaching.

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The findings and analysis emphasise the significance of strategic, context-specific, and multi-level leadership practices implemented to make a positive difference to the school learning environment and develop effective teaching. The analysis also demonstrates how leadership is mediated through people and processes at various levels

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Acknowledgements

I extend my sincere thanks to the following people who have offered invaluable assistance during the completion of this thesis:

- My Principal Supervisor Associate Professor Richard Niesche and Co-Supervisor Associate Professor Scott Eacott, for the quality of their advice and guidance;
- The Principals for supporting this thesis by permitting research to be conducted in their schools;
- The research participants for their time and insights generously and graciously offered during the fieldwork;
- ❖ My family, to whom this thesis is dedicated, for their enduring love and support.

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List of Acronyms

ACARA	Australian Curriculum, Assessment and Reporting Agency
AFL	Assessment for Learning
AIS	Association of Independent Schools
AITSL	Australian Institute for Teaching and School Leadership
APST	Australian Professional Standards for Teachers
ATAR	Australian Tertiary Admission Rank
CAPA	Creative and Performing Arts
CMEE	Comprehensive Model of Educational Effectiveness
DASI	Dynamic Approach to School Improvement
DMEE	Dynamic Model of Educational Effectiveness
DVD	Digital Video Disk
GDP	Gross Domestic Product
HOD	Head of Department
HREA	Human Research Ethics Approval
HSC	Higher School Certificate
HTA	History Teachers' Association
IB	International Baccalaureate
ICSEA	Index of Community Socio-Educational Advantage
ICT	Information and Communication Technologies
IQEA	Improving the Quality of Education for All
IT	Information Technology
ISIP	International School Improvement Program
LEA	Local Education Authority
LMS	Learning Management System
NAPLAN	National Assessment Program Literacy and Numeracy
NCCD	Nationally Consistent Collection of Data
NESA	New South Wales Education Standards Authority
NST	New Scheme Teacher
NSW	New South Wales
OECD	Organisation for Economic Co-operation and Development

PBL	Project Based Learning
PDHPE	Personal Development, Health, Physical Education
PISA	Program for International Student Assessment
PISC	Participation Information Statement and Consent
PLC	Professional Learning Community
QTF	Quality Teaching Framework
SER	School Effectiveness Research
SES	Socio-Economic Status
SIR	School improvement Research
SLT	School Leadership Team
STEAM	Science, Technology, Engineering, Arts, and Mathematics
TAFE	Technical and Further Education
TIMSS	Trends in International Mathematics and Science Study
UK	United Kingdom
UNSW	University of New South Wales
US	United States
VET	Vocational Education and Training

Chapter 1 - An indispensable asset

1.0 Context

The challenges of the current millennium are well documented (Schleicher, 2018). They include financial crises, irreversible climate change, exponential population growth, vast demographic shifts, widespread famine, systemic poverty, pandemics on an unprecedented scale such as COVID-19, rapid scientific and technological advances, as well as unparalleled political instability (Organisation for Economic Cooperation and Development [OECD], 2021). In this volatile landscape, schools have come to be viewed by governments and other stakeholders as one of the most significant institutions in society, expected to produce graduates with the necessary knowledge and skills to successfully negotiate and overcome the unpredictable global concerns of the 21st century (Henard & Roseveare, 2012; Tschannen-Moran & Gareis, 2015). Against this backdrop, education is widely regarded as crucial for the success of individuals and their nations (Leithwood & Seashore Louis, 2012). Delors (1996) regards education as "an indispensable asset" (p. 13) in solving broader social and economic problems.

The role of educational institutions in meeting the myriad challenges of this century has led to education reform and the pursuit of school improvement on an unmatched international scale (Daggett, 2008; Townsend, 2007). Day, Gu and Sammons (2016) argue that "the past 20 years have witnessed remarkably consistent and persisting worldwide efforts by educational policy makers to raise standards of achievement for all students through various school reforms" (p. 222). In this context, schools and school systems in most countries are under increasing pressure to improve their performance in the national interest (Creemers & Kyriakides, 2012). In the 37 OECD member countries, more than 200

school improvement policies were implemented from 2015-2019. The main policy priorities and trends in this time have focused on developing quality in three areas: learning environments, teaching, and leadership (OECD, 2019).

This new era of global education reform as a critical determinant of a nation's economic prosperity, social stability, and personal well-being, has been accompanied by increased expenditure, driven by the shared conviction of many politicians and policy makers, that greater investment in education will lead to improved schools and school systems (Fullan, 2011). From 2012-2017, the educational expenditure per student grew by 17% in OECD countries (OECD, 2020). According to the OECD (2021), a large share of its member countries increased their educational expenditure in 2020 in response to the global pandemic. However, previous research, discussed in Chapter 2, suggests that greater investment in education, in and of itself, does not necessarily improve student achievement (Hanushek, 1986; 1989). A prominent school improvement researcher in this country Masters (2014) argues that substantial increases in expenditure on schools has failed to deliver measurable improvements in student performance in Australia.

In the school improvement literature, Sleegers & Leithwood (2010) identified two dominant theoretical perspectives, externally driven and internally focused reform. The former, referred to as 'top down' and 'outside in' reform (Hopkins, 2013), emphasises the implementation of externally driven, evidence-based reform developed by policy makers. It includes introducing national curriculum and assessment regimes, establishing teacher and principal professional standards, public reporting of school performance, and strict accountability protocols imposed by educational authorities (Thoonen, Sleegers, Oort, & Peetsma, 2012). The latter, referred to as 'bottom up' and 'inside out' (Hopkins, 2013),

focuses on building school-wide capacity for reform to improve teacher praxis and enhance student outcomes. It is based on the strategy of schools assuming responsibility for their own improvement agenda and transforming themselves to support teaching and learning, giving rise to the concept of 'self-improving schools' (Hargreaves, 2011). Most of the current educational reforms are externally driven, despite the limited success of 'top down' approaches in producing sustained school reform (Hopkins, 2013). This has led to a greater desire within schools for change, focusing on improving teaching and learning (Dinham, 2007).

The international trends in school improvement are reflected in the Australian context, where a new age of national educational reform has been underway since 2007 (Watterston & Caldwell, 2011). Constitutionally, education in Australia is a state and territory responsibility. Nevertheless, due to the extraordinary twenty-first century contextual factors previously identified, the Federal Government has played an increasingly centralised role in policy development, funding, accountability, and reporting (Rudd & Gillard, 2008), as well as setting expectations that schools and school systems, "ensure the nation's ongoing prosperity and social cohesion" (Education Council of Australia, 2019, p. 2). This national role, dubbed 'new federalism', can be classified as externally driven reform . It has resulted in federally led policies and strategies aimed at achieving excellence and equity for all students (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008).

This education reform agenda has assumed a sense of urgency in the context of the performance of Australian students in international testing programs such as Trends in International Mathematics and Science Study [TIMSS], and the Program for International

Student Assessment [PISA], which has been in steady decline in comparison to other OECD countries since 2000 (Jensen, 2019; Masters, 2016; Thomson, De Bortoli & Underwood, 2016). This decline is of concern in a nation where education is considered critical to economic prosperity and social opportunity (Australian Government, [Gonski Report 2.0], 2018). Despite the limitations of international assessments for policy development, it appears that they are driving the reform agenda in Australia (Buckingham, 2012), from a 'top down' and 'outside in' manner, amidst constant calls by government and policy makers for school leaders to solve educational problems (Niesche, 2018), as well as government pressure on schools to improve teacher quality to boost student learning outcomes (Chew & Andrews, 2010).

A National Plan for School Improvement was implemented in 2014, with greater attention than ever on leaders improving teacher quality and student outcomes for both individual and national prosperity (Centre for Education Statistics and Evaluation, 2014). It provided the blueprint for creating an internationally recognised quality education system. As part of this scheme, the Australian Government conducted a review of school funding, which recommended an unprecedented funding increase of \$18.6 billion from 2015-2025 to support this plan, including \$275.6m in reward payments to schools that demonstrate improved student outcomes (Commonwealth of Australia, [Gonski Review], 2013). An independent body, the National Schools Resourcing Board, was established to monitor the distribution of funding, particularly to the most under-funded schools (Goss, 2017). A subsequent review of school funding commissioned in 2014 by the new Federal Government, led to amendments to this package, including an additional \$5 billion in funding, the introduction of a needs-based funding model, and a redacted timeframe of six

years (Australian Government, 2018). The 2021 Intergenerational Report estimates that Commonwealth spending on education in 2022-2023 will be \$40 billion, or 1.9% of gross domestic product [GDP]. This level of expenditure is expected to remain consistent as a percentage of GDP over the next 40 years (Commonwealth of Australia, 2021).

The other centrally driven reforms pertinent to primary and secondary education include the establishment in 2008 of the Australian Curriculum, Assessment and Reporting Agency [ACARA] to ensure greater transparency and accountability in schools. This body has been responsible since its establishment, for delivering the National Assessment Program Literacy and Numeracy [NAPLAN]. It was also accountable for developing and implementing a national K-12 curriculum commencing in 2012. The reforms have also included the establishment in 2009 of the Australian Institute for Teaching and School Leadership [AITSL], which has seen the development of a national set of standards to improve teaching and school leadership. Additionally, the MySchool Website was created in 2010 to provide information, including student achievement, to the public, on every school in the country.

The Australian Government's current 'top down' and 'outside in' school education policy focuses on improving outcomes for all students, consistent with the goals of the Alice Springs (Mparntwe) Education Declaration (Education Council of Australia, 2019). This renewed plan for Australia's education system, superseding the Melbourne Declaration (Barr et al., 2008), contains two main goals: promoting excellence and equity in education; and ensuring all young Australians become confident and creative individuals, successful lifelong learners, and active and informed members of the community. The predominant shift in the revised plan, in relation to its predecessor, is its emphasis on student

participation in the economy and society for the purpose of thriving "in a time of rapid social and technological change, and complex environmental, social and economic challenges" (Educational Council of Australia, 2019, p. 2).

Internally focused, or 'bottom up' and 'inside out' school improvement reform efforts in Australian schools include providing more school-based teacher professional learning opportunities, using teacher standards and professional development frameworks to improve pedagogy, focused use of school resources to improve learning, curriculum design emphasising individualised instruction, monitoring student outcomes and performance, and using data to inform teaching practice (Masters, 2014).

1.1 Statement of the problem

Internally driven school reform is consistent with the findings of School

Effectiveness and School Improvement literature over the last four decades. These findings indicate that school leaders are strategically placed to have the most significant influence on student outcomes (Schleicher, 2012). Research has also highlighted the empirical relationship between school leadership and improved student achievement, which has been shown to be mediated through school conditions and teachers (Hallinger & Heck, 1998). Whilst school leaders have an indirect influence on student outcomes, they have a direct impact on creating the conditions that enhance and support the work of teachers, focusing the school on goals and expectations pertaining to student achievement, strengthening the professional learning environment of teachers, and providing structures and resources to support teaching and learning (Seashore Louis, Leithwood, Wahlstrom & Anderson, 2010; Hallinger & Heck, 2011b).

Despite the significant body of literature indicating that school leaders are critical to improving schools, the international research is largely inconclusive about how they develop the school level conditions that support and enhance the work of teachers to improve student outcomes (Leithwood & Seashore Louis, 2012). Day & Sammons (2013) argue that, the question of the size of leadership effects and how they operate to raise student outcomes, remains a subject of dispute. This debate centres on studies that show substantially different effect sizes among leadership practices (Leithwood & Sun, 2012). At one end of the spectrum, small to medium scale qualitative studies show substantial leadership effects. At the other end, large scale quantitative studies demonstrate a limited effect. Whilst in between, meta-analyses indicate mixed results (Day & Sammons, 2013).

Additionally, the literature reviewed in the next chapter shows that studies which have investigated the relationship between leadership and school improvement, have a variety of limitations. First, they have emphasised leadership theories, styles, and dimensions rather than specific practices, relating to principals almost exclusively, rather than other leadership roles (Sebastian, Huang & Allensworth, 2016). Second, they have been undertaken predominantly in turnaround primary schools in North America and Europe, in mainly low socio-economic urban settings (Thrupp, 1999). Third, most of the studies concentrate on the classroom level, rather than the school level (Muijs, Kyriakides, van der Werf, Creemers, Timperley & Earl, 2014).

The gap in the school improvement literature therefore, particularly in the Australian context, and most notably in the complex secondary school landscape, is how leaders operate at the school level to develop a learning environment that facilitates effective teaching. The key leadership practices that improve student outcomes through

mediating variables at the school level are worthy of investigation in the current context, in which schools are under significant pressure to improve student achievement which is inextricably linked to the individual and national interest (Marsh, Waniganayake, & de Nobile, 2016). These leadership practices assume added significance in the current climate in which the Australian Government's school reform agenda includes greater autonomy for principals and their leadership teams to implement internally driven initiatives to improve student achievement, which is declining in international testing programs in comparison to other OECD countries (Jensen, 2019; Masters, 2016: Thomson et al., 2016).

1.2 Purpose of the thesis and research questions

Broadly speaking this thesis responds directly to calls in the literature for more theory-driven and evidence-based models of leadership and its relationship to school improvement (Creemers & Kyriakides, 2012). Specifically, it responds to the request for researchers to investigate how enhancing the school learning environment could contribute to the effectiveness of schools. "Researchers should investigate the actions that school leaders take to improve the school learning environment. In this way, a dynamic perspective could be adopted, and researchers could study how changes in the school learning environment can contribute to changes in the effectiveness status of schools" (Kyriakides & Creemers, 2016, pp. 355-356). It is also a response to calls for more specific research into the instructional leadership of heads of department (HODs) in school improvement, in order to build this knowledge base (Grootenboer, 2018; Leithwood 2016).

The purpose of this thesis then was to investigate the differential leadership practices that develop the school learning environment to facilitate effective teaching, within a 'self-improving school' paradigm. This inquiry broadened the conceptualisation of

leadership to investigate the role of middle leaders in improving schools, in relation to how they make a positive difference to the faculty learning environment and effective teaching.

The investigation was guided by four main **research questions**:

- What practices are implemented by school leaders to improve the school learning environment?
- ➤ What practices are implemented by faculty leaders to improve the faculty learning environment?
- ➤ What practices are implemented by school and faculty leaders to align the faculty learning environment to the school learning environment?
- What practices are implemented by school and faculty leaders to improve teacher effectiveness?

A further aim in this thesis was close analysis of the main underlying theoretical assumption that effective school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to develop the school learning environment and improve teaching (Leithwood & Sun, 2012; Marks & Printy, 2003; Printy, Marks & Bowers, 2009). This theory is based on the argument from Day et al. (2016, p. 253) that there is "no single leadership formula for achieving success. Rather, successful principals draw differently on elements of both instructional and transformational leadership and tailor their strategies to their particular school contexts and to the phase of development of their school". This theory is analysed in conjunction with the data collected from the qualitative research methods used during the fieldwork phase of this thesis.

My professional motivation for embarking on this research journey was as follows.

My career as a teacher, leader, and Head of an independent secondary school, has been underscored by a passion for leading school improvement. In my role, I have a good deal of

autonomy to shape a reform agenda and implement it in my own context, to make a difference to the lives of students, as the highest priority. Gaining insights into how best to improve my school, inspired this search for the right drivers, the holy grail for school leaders. Empirical evidence about what to improve in schools and how to achieve it, is a valuable commodity to be shared with the school improvement community.

1.3 Significance of the thesis

The significance of this thesis is that it responds directly to calls in the literature to increase understanding of how school leaders improve schools (Seashore Louis, Dretzke & Wahlstrom, 2010). It has the following points of difference from other studies, which form the foundation of its contribution to the gaps in the literature. The multi-site case study was undertaken in a broad range of independent secondary schools in New South Wales [NSW], Australia. It focuses on the specific combination of leadership practices that develop the school learning environment, as well as support and enhance the work of teachers to improve student outcomes. The leadership net was cast wider than principals to include members of the leadership or executive team, as well as HODs, the latter an underresearched dimension in the current literature (Grootenboer, 2018; Leithwood, 2016). According to de Nobile (2018b), there is a substantial gap in the literature about the impact of middle leaders on teacher quality and student learning outcomes.

For the purpose of this thesis middle leaders are defined as instructional leaders in secondary schools, commonly known as Heads of Department. They have an acknowledged position of leadership and a significant teaching role, positioned between the principal and the teaching staff, leading from among their colleagues to improve teaching and learning practices (Grootenboer, Edwards-Groves & Ronnerman, 2019). HODs are a focus of my

investigation because the empirical evidence of middle leader influence is limited (Harris, Jones, Ismail & Nguyen, 2019), representing a gap in the literature that this thesis can potentially fill. de Nobile (2019a, 2019b) argues that middle leaders are becoming more important in schools for three reasons. Due to the demands of their role, principals have delegated their authority to other leaders. "Principals cannot carry the weight of increased administration and leadership work alone" (de Nobile & Rigdon, 2014, p. 2). As a result, middle leaders have assumed some of this workload, particularly in relation to instructional leadership. Additionally, increased accountability from external bodies for enhanced curriculum delivery and student achievement has provided momentum for this devolution of responsibility. Most importantly, middle leaders have a close relationship with teachers through whom they can exert their influence at the 'chalkface'.

The research design employed to investigate senior and middle leadership collected data from multiple perspectives, providing empirical evidence focusing on school and faculty level practices and processes that contributed to an enhanced learning environment and improved teaching in the case study schools. This evidence provides practical insights in terms of what to improve and how to achieve this in a secondary school context. Overall, the findings in this thesis have significant implications for current and aspiring school leaders in relation to the focus of their internally driven school improvement efforts, as well as leadership preparation programs, further research, and policy development.

The findings of this thesis contribute to the broader school improvement knowledge base by providing an insight into how leaders implement context specific actions to develop the school learning environment to facilitate effective teaching. The four-factor model of school improvement that emerged from the findings is valuable to leadership

practitioners who can decide where to focus their reform efforts and how to resource them. Leaders can adopt the practices shown, to positively influence school level conditions. Specifically, they may shift the focus of their reform from the classroom to the school level, to create organisational conditions conducive to improving the quality of all teachers, thereby making best practice common practice (Masters, 2011). This would potentially make a difference to all students, thereby contributing to the goals of the Alice Springs (Mparntwe) Education Declaration. This is particularly relevant in the Australian secondary school context, where there is a significant disparity in achievement between high and low performing students (Watterston & Caldwell, 2011).

Empirical evidence supporting the most effective leadership practices that improve the school learning environment and develop teaching, could in turn shape the content of professional learning programs for current and future school leaders. As mentioned previously, AITSL was established as part of a suite of school improvement reforms at a federal level. The mission of this organisation is to improve educational outcomes for all students by developing expertise in teaching and leadership based on research, which is embedded in standards frameworks for teachers and leaders. State based organisations such as the Association of Independent Schools [AIS] also integrate practitioner research findings into their professional learning programs. The findings of this thesis can inform these frameworks, and professional learning for current and aspiring school leaders.

These findings could also provide a more balanced global perspective on school improvement by broadening the research base as called for by scholars (Huber & Muijs, 2010). This could lead to further research and debate in the field. Researchers theorising about the leadership practices that are most likely to improve the variables in schools

which have the biggest impact on student learning, could be interested in the findings of this thesis. The development of a strong conceptualisation of leadership at the school level that facilitates effective teaching, may lead to further theory generation in the field. This knowledge could in turn contribute to the debate about how to improve schools and lead to further empirical research. Scholars can conduct additional research to verify or challenge the findings of this thesis. Additionally, this research activity could catch the attention of policy makers actively scanning the literature in pursuit of school improvement strategies, particularly in the Australian context.

1.4 Thesis structure

This thesis consists of nine chapters. Chapter 1 has provided the context and rationale for this thesis. Chapter 2, which follows this one, reviews the School Effectiveness and School Improvement literature, as well as the school leadership discourse, from which a conceptual framework to guide this investigation was derived. This framework is an integrated multi-level model, the established methodology in conducting school effectiveness and improvement research (Goldstein, 2003). It focuses on the school level unlike other models, such as the Comprehensive Model of Educational Effectiveness [CMEE] (Creemers & Kyriakides, 2008), which examine the classroom level only. The addition of a faculty level in the framework, facilitates an examination of the contribution of middle leaders to enhancing the learning environment to improve teaching. The research questions identified, emerged from this conceptual framework.

Chapter 3 describes the research design developed to investigate these research questions. This thesis employs a qualitative approach to achieve its research aims, including close analysis of its main underlying theoretical assumption. It comprises a multi-

site case study of four independent, secondary schools in NSW. The case study methodology was selected for its established methodological rigour (Yin, 2012 Lin, 2014), capacity to investigate participants' lived experience in their own context (Miles & Huberman, 1994), and the rich data it yields (Bazeley, 2013).

The research methods used for each of the case studies comprised semi-structured interviews with 10 participants inclusive of the principal, four heads of department, and five teachers; observation of teachers and students in their daily in school activities; along with document analysis of school and faculty level strategic plans; as well as relevant curriculum documentation. The chapter also presents details of the systematic process of data collection and analysis. The methodology selected for this thesis was effective in terms of generating valuable data in response to the research questions guiding it. Nevertheless, the challenges involved in conducting fieldwork, data collection and analysis are also explained. The strengths and limitations of the research methodology, along with ethical considerations and the role of the researcher, are likewise addressed.

Chapters 4 to 7 present the main findings from each case study in relation to how leaders improved the school learning environment and teaching in their respective context. The main theoretical assumption underpinning this thesis is closely analysed in these chapters, confirming that effective school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to contribute to enhancing the school learning environment and teaching. The findings and analysis show how leadership is mediated through people and processes at various levels in a secondary school, a factor still largely absent from much of the literature that seeks to explain the relationship between leadership and student outcomes.

Chapter 8 presents a comprehensive discussion of the meta-themes that emerged from the findings: negotiating contextual dynamics to plan and implement reform; forming a coalition to drive instructional change; aligning key stakeholders to the reform agenda: and building academic culture to facilitate change. This four-factor model reveals the right drivers for school improvement (Fullan, 2011) and the processes that underpin them. I argue that these four factors are significant in that they are collectively required to contribute to school improvement.

Finally, Chapter 9 explains how the research aims of this thesis have been met. It explores the contribution of this thesis to existing gaps in the School Effectiveness and School Improvement literature, and its implications. An important contribution this thesis makes is a theory-driven and evidence-based model of school improvement which reveals the right drivers for school improvement. It offers insights for the benefit of school leaders, leadership preparation programs, researchers, and policy makers, as they seek to further their knowledge of how school leaders enhance the learning environment and teaching, in a secondary school context. Additionally, it outlines the limitations of this thesis and makes suggestions for further research to expand the school leadership knowledge base. To draw this thesis to a close, I reflect on the professional implications of undertaking this challenging and rewarding research journey.

Chapter 2 - The school leadership black box

2.0 Introduction

This chapter systematically reviews the extant School Effectiveness and School Improvement literature, as well as the school leadership discourse, with close attention to the relevant approaches, theories, models, and findings. In particular, it discusses the debates about leadership and its relationship to school improvement, to explore the gap where this thesis seeks to contribute. The conceptual framework that emerged from the literature is explained in detail and linked to the research design guiding this thesis.

2.1 School Effectiveness Research

School Effectiveness Research [SER] is defined as "a line of research that investigates performance differences between and within schools, as well as the malleable factors that enhance school performance, usually using student achievement scores to measure the latter" (Luyten, Visscher & Witziers, 2005, p. 249). The aim of SER is to determine the school characteristics at different levels: student, teacher, and school, that explain the differences in student achievement, accounting for family background (Kyriakides et al., 2010). In an effective school, student progress exceeds expectations after adjusting for student intake factors. Effective schools add value to student outcomes in comparison to schools with similar family background characteristics. By contrast, in an ineffective school, students make less progress than expected (Scheerens, Bosker & Creemers, 2001).

SER had its genesis in the United States [US] in the 1970s and in the next decade expanded to the United Kingdom [UK], the Netherlands, Australia, and elsewhere (Teddlie & Reynolds, 2001). The catalyst for this emerging field was the studies of Coleman et al.

(1966), and Jencks et al. (1972). The main finding from Coleman et al. (1966) was that "schools bring little influence to bear on a child's achievement that is independent of his background and general social context" (p. 235). Jencks et al. (1972) replicated the Coleman et al. (1966) findings, that schools account for approximately 10% of the variance in student achievement, after statistical adjustment for student background characteristics (Scheerens, 1990). These studies were largely responsible for the view that schools do not make a difference to student outcomes (Mortimore, 2001). In response to the findings of these studies, SER was founded on the fundamental premise that schools can make a difference to learning, and thereby enhance student life chances (Reynolds et al., 2014).

2.1.1 Phases of School Effectiveness Research

Three phases of SER have been identified in the literature (Hopkins, 2009). The first phase, in the 1960s and 1970s, attempted to refute the 'Coleman Hypothesis' that family background was the exclusive determinant of student achievement. Studies in this phase investigated the factors that enabled schools to add value to student learning, accounting for background characteristics (Lezotte, 2009). The second phase, in the 1980s, attempted to investigate how schools became effective. Measures of effectiveness in this phase were broadened to include non-cognitive outcomes such as student social and emotional wellbeing. The goal of SER in this period shifted to identifying factors associated with effective schools, so that they could be applied to underperforming schools to make them effective (Townsend, 1997). The third phase, commencing in the 1990s, witnessed methodological advances and development of theory and theoretical models. Calls for the merger of SER and School Improvement Research [SIR] were also a feature of this period (Hopkins, 2009).

First generation SER studies were distinguished by a focus on characteristics evident in schools classified as effective. School and classroom level variables that contributed to school effectiveness and distinguished high from low performing schools were identified (Scheerens et al., 2001). One of the most influential studies (Edmonds, 1979), reported five correlates of school effectiveness: leadership of the principal; focus on mastery of basic skills; orderly school environment; high teacher expectations of student performance; and frequent monitoring of student progress (Reynolds, Hopkins & Stoll, 1993). Another landmark study (Rutter, Maughan, Mortimore & Ouston, 1979), independently reported correlates consistent with the study conducted by Edmonds (1979). According to Lezotte (1995), other significant studies such as Brookover (1979), and Mortimore, Sammons, Stoll, Lewis and Ecob, (1988), also refuted the findings of Coleman et al. (1966) and Jencks et al. (1972), corroborating the original findings of the studies of Edmonds (1979) and Rutter et al. (1979).

The results of the original research conducted in the UK by Edmonds (1979), as well as subsequent studies in Great Britain by Brookover (1979), and in the US by Rutter et al. (1979), were collated and corroborated by later studies (Townsend, 1997). The distinctive characteristics of effective schools, identified by several landmark studies in various countries (Townsend, 1997), are summarised in Table 2.1. The correlates shown represent the school and classroom characteristics positively associated with student achievement (Lezotte, 2001). The findings of these studies have revealed the multi-level influence on student achievement (Teddlie & Reynolds, 2000). That is, student achievement is influenced by factors at four main levels: the broader context or system, the school, the classroom, and student background factors. Importantly, organisational variables, such as

the school and the classroom level, particularly with regard to the learning environment and quality of teaching, were found to be influenced directly by school leaders to facilitate higher student achievement (Lezotte & Snyder, 2011).

Table 2.1 Summary of correlates from key School Effectiveness Research

	Author and date of research						
Correlates	Edmonds (1979)	Purkey & Smith (1983)	Brookover (1986)	Levine & Lezotte (1990)	Scheerens (1992)	Sammons, et al. (1995)	
1. Strong instructional leadership	✓	√	✓	√	✓	√	
2. Clear and focused mission	✓	✓		✓		✓	
3. Safe and orderly environment conducive to learning	√	√	√	√	√	√	
4. Climate of high expectations	✓	✓	✓	✓	✓	✓	
5. Frequent monitoring of student progress	✓	✓		✓	√	✓	
6. Positive home-school relations			√	✓	✓	✓	
7. Opportunity to learn and time on task			✓	✓	✓	✓	
8. Staff professional development		✓				✓	
9. Teacher quality		√			✓	✓	
10. Teacher involvement in decision making		v					
11. Acquisition of basic skills	✓		,				
12. Students taking responsibility for learning			✓			√	

Analysis of the findings illustrated in Table 2.1 reveals several conclusions. The original characteristics of effective schools identified by Edmonds (1979) have been empirically validated by research conducted in a variety of countries, in both primary and secondary schools. Leaders and practitioners subsequently took interest in these findings as they saw in them possibilities for making their own schools effective (Lezotte, 2001). However, Sammons, Hillman and Mortimore, (1995) cautioned that these factors do not provide a blueprint for the creation of effective schools because they indicate a correlational rather than causational relationship with school effectiveness. Instead, these characteristics provide a starting point for schools to evaluate their effectiveness. Further research was called for to determine the interaction of these factors, and their relationship with student background and school context (Mortimore, 1993). Finally, the view that schools can and do make a difference, established and consolidated by the various phases of SER, led to school leaders being held accountable for the performance of their school, irrespective of student intake and school location (Reynolds & Teddlie, 2001).

2.1.2 Criticisms of School Effectiveness Research

SER identified the characteristics of effective schools and demonstrated that given the appropriate conditions, all students can learn and achieve (Hopkins, 2013). The main finding of SER has been that schools make a small, yet statistically significant difference to student learning outcomes (Mortimore, 2001). Nevertheless, several critical perspectives have emphasised theoretical, methodological, political, and other limitations in the field (Luyten et al., 2005).

One of the main criticisms of the field is that it lacked theoretical robustness (Coe & Fitzgibbon, 1998; Ralph & Fennessey, 1983; Sammons et al., 1995; Slee, Weiner & Tomlinson, 1998). Edmonds' (1979) 'Five Factor Theory' has been labelled a misnomer, due to its lack of a theoretical explanation about causation of school effectiveness (Creemers & Reezigt, 1996), or ineffectiveness (Rowan, Bossert & Dwyer, 1983). "The effective schools research provided a vision of a more desirable place for schools to be but gave little insight as to how best to make the journey to that place" (Lezotte, 1995, p. 5). Whilst the broader research identified the characteristics of effective schools, it was seen to be deficient in explaining how effective schools became effective as a result of the interaction of these factors (Reynolds et al., 1993; Sammons et al., 1995).

Despite caution against leaping from correlates to practice (Barber, 1996), SER experienced the pitfall of "improperly inferring causation from correlation" (Preece, 1989, p. 48). Causation is an important issue, since SER is concerned with investigating school factors that explain student achievement (Creemers & Kyriakides, 2010a). The general lack of theoretical frameworks in the field (Slater & Teddlie, 1992; Mortimore, 1993), led to calls for clearer theory generation and testing that explained the causes of student achievement (Reynolds, 1997), because theories of causality could potentially guide school leaders and practitioners in implementing processes to enhance student achievement (Creemers, 2002).

A related criticism of SER was its methodological limitations (Reynolds et al., 1993). The major studies in this tradition have been conducted mainly in primary schools in poor urban neighbourhoods in the US and UK, which prompted calls for the research base to be broadened (Scheerens, 1993; Slater & Teddlie, 1992). Additionally, this tradition was

criticised for initially placing too much emphasis on quantitative research approaches and cross-sectional studies (Coe & Fitzgibbon, 1996). This shortcoming emphasised the need to collect rich qualitative data focusing on school processes that lead to effectiveness or ineffectiveness, and longitudinal research to measure changes in school effectiveness over time (Luyten, et al., 2005). These developments, it was argued, would potentially increase the practitioner relevance of SER (Reynolds, et al., 2014).

Another criticism of SER related to methodology, concerned its narrow focus on cognitive outcomes, essentially basic reading and mathematical skills in test scores non-aligned to curriculum, as the primary source of effectiveness (Coe & Fitzgibbon, 1996). Test scores do not account for school variables, such as size of school, class size, and teaching time (Elliott, 1996). Additionally, instruction, curriculum, and pedagogy, important dimensions of an effective school, were neglected by SER (Elliott, 1996; Wrigley, 2006). This reductionist approach has been criticised on the grounds that it was an inaccurate measure of effectiveness because it did not incorporate the full curriculum (Creemers, 2002; Gorard, 2010). This led to the acknowledgement that non-cognitive outcomes of education such as social and emotional development, needed to be included in measures of school effectiveness (Mortimore, 1991, Townsend, 1994; Witte & Walsh, 1990).

A further criticism of measuring test scores as reflective of school effectiveness was that it suited a politically driven league table paradigm (Slee et al., 1998). This led to schools and principals being blamed for under-performance (Elliott, 1996), and held accountable for outcomes despite having no control over factors such as student intake (Coe & Fitzgibbon, 1998; Gorard, 2010). It also led to unfair comparison of schools with different student intakes (Luyten, et al., 2005). The result was that it became politically

expedient to hold schools accountable for low performance, rather than governments for their failure to address the root causes of socio-economic inequality (Reynolds & Teddlie, 2001; Slee et al., 1998).

The politics of 'blame and shame' emphasised a further limitation of SER, its failure to account for the impact of context on student achievement (Nixon, Martin, McKeown & Ranson, 1997). Edmonds (1979) and Rutter et al. (1979) neglected to examine the role of school context in their studies (Yiasemis, 2005). Student intake factors: prior attainment, socio-economic status [SES], ethnicity, and gender, were not adequately accounted for in achievement scores in subsequent studies, despite student background factors accounting for a larger percentage of variance in student outcomes than the school attended (Coe & Fitzgibbon, 1998; Preece, 1989). Due to the de-contextualised nature of SER, some scholars warned that SER should be used with caution by practitioners because results of studies were not readily transferable to other contexts, a warning that went unheeded in many instances (Hamilton, 1996; Mortimore, 1995; Reynolds & Teddlie, 2001; Sammons et al., 1995; Slater & Teddlie, 1992; Townsend, 1997; Wrigley, 2006).

A strident critic of the field, Thrupp (1995) argued that governments worldwide used SER findings to implement education policy, despite failing to account for student intake factors. Consequently, SER and education policy failed to address systemic social inequality. This led Thrupp (1999) to conclude that SER lacked ideological independence and, therefore, could not overcome the effects of social inequality. He also criticised early studies such as Edmonds (1979) and Rutter et al. (1979), for disregarding classroom characteristics of effective schools, and noted the predominantly western settings in which SER had been conducted: North America, Great Britain, Australia, New Zealand, the

Netherlands, and Scandinavia. An important gap in SER, in the context of this thesis, is its failure to consider the crucial variable of leadership in terms of its contribution to school effectiveness (Coe & Fitzgibbon, 1998; Purkey & Smith, 1983; Reynolds et al., 1993; Wrigley, 2006). The correlates of effective schools were identified but not linked to leadership practices (Elliott, 1996). Yet another limitation of SER has been identified as its principal-centricity (Gurr, Drysdale & Mulford, 2006). This thesis endeavours to overcome that limitation by investigating leadership practices beyond those of the principal.

2.1.3 Advances in theory and methodology

Criticisms of SER led to the development of sounder theoretical models over time (Luyten et al., 2005). Early models were restricted to the student, teacher, and classroom levels. Subsequent conceptual frameworks integrated school and external contextual levels in addition to the student, teacher, and classroom (Creemers & Reezigt, 1996). Furthermore, several conceptual models were developed based on theories relating to classroom level processes, such as learning theory (Reynolds & Teddlie, 2001). In addition to the development of improved theoretical underpinnings of school effectiveness, criticisms of research designs, sampling, and statistical techniques, led to methodological advances in SER (Creemers & Kyriakides, 2008). The development of multi-level models and the associated computer software to calculate their effects, provided researchers with improved approaches for investigating school effectiveness (Rumberger & Palardy, 2004). Multi-level modelling, multiple regression analysis, meta-analyses, structural equation modelling, growth curve modelling, and mixed-methods research, represented significant methodological advancement in SER (Goldstein, 1997). Consequently, multi-level modelling became the established methodology in conducting SER, due to its capacity to

differentiate and measure the factors that contribute to student achievement at various levels (Goldstein, 2003; Sammons, 1995).

2.1.4 School effectiveness approaches and theoretical models

Three distinct historical approaches to investigating school effectiveness are identified in the literature (Creemers, 2005). The economic approach dominant in the 1960s, the educational-psychological approach in the 1970s-1980s, and the generalist-educationalist approach in the 1990s (Kyriakides, 2005). The first was an economic production-function paradigm which investigated the relationship between inputs and outputs to identify the input variables that have the biggest impact on outputs (Parkerson, Lomax, Schiller & Wahlberg, 1984). The second, included process factors that provided theoretical explanations of why particular schools are more effective than others (Scheerens, 1990). The third recognised the contribution to student outcomes of factors interacting at various levels; students nested in classrooms, classrooms nested in schools, schools nested in different contexts (Scheerens, 1997). These approaches to investigating school effectiveness led to the emergence of various models and development of theory (Creemers, 2005).

2.1.4.1 Economic approach and models

The economic approach attempted to separate input variables and determine their effect on outputs, estimated by multiple regression analysis (Parkerson et al., 1984). Inputs consisted of student background factors, teacher characteristics, learning conditions and school conditions. Student intake factors included race/ethnicity, SES, and prior ability. Teacher characteristics comprised teaching background, personal qualities and attitudes. Learning conditions consisted of class size and composition. School conditions included

facilities and expenditure. Inputs were regarded by researchers as links in a causal chain. Some inputs had direct effects and others indirect effects on outputs (Glasman & Biniaminov, 1981). Outcomes, most commonly measured by achievement in basic skills tests, defined effectiveness according to this framework (Aitkin & Zuzovsky, 1994).

In the economic approach, production-function or input-output models emerged (Kyriakides, 2005). Rutter et al. (1979) and Brookover (1979) are examples of studies based on the input-output model (Willms & Raudenbush, 1989). These models, as represented in Figure 2.1, attempted to explain how increased inputs would lead to increments in outcomes.

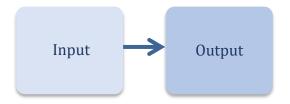


Figure 2.1 Input-output model

The aim of research employing this linear model was to determine the value added by the school to student achievement after accounting for student intake factors (Scheerens, 1997). Value added was defined as "progress made by the students from their level of performance on entry to the level of performance at the time they leave" (Mortimore et al., 1994, p. 318). The rationale for this model was that increased inputs would lead to improved outcomes (Creemers, 2005; Scheerens, 1997). For example, it was assumed that increases in per student expenditure, would produce greater educational outcomes. The research undertaken using this model, indicated that the relationship between inputs and outputs was more complex than assumed (Creemers, 2005).

Additionally, findings show small effects for the input variables identified (Scheerens, 1990). For instance, increasing funding per student does not necessarily lead to higher student outcomes, nor does reducing teacher-student ratios (Hanushek, 1986; 1989). The main deficiency of the model was its failure to explain process variables such as teaching and learning, as well as the school context that influences them (Aitkin & Zuzovsky, 1994). Subsequent approaches to investigating school effectiveness represented an extension of the economic approach and the basic production-function model (Scheerens, 1997).

2.1.4.2 Educational-psychological approach and models

Unlike the economic approach, the educational-psychological or value-added approach defined effectiveness, in addition to student achievement, as school processes that contributed to student outcomes (Aitkin & Zuzovsky, 1994). It broadened student intake factors to include motivation. Process indicators referred to school factors that can be manipulated by leaders and teachers (Scheerens, 1990). The latter accounted for the processes linking intervening variables; school context, leadership, and instruction, to student outcomes (Aitkin & Zuzovsky, 1994).

In the educational-psychological approach, process-product or input-process-output models emerged, as shown in Figure 2.2.



Figure 2.2 Input-process-output model

Process-product studies investigating the variables that contribute to student outcomes, revealed the school level processes associated with student achievement; instructional leadership, school environment, and quality teaching (Scheerens, 1990).

The 'Model of School Learning' (Carroll, 1963), shown in Figure 2.3, was the best known and most influential process-product model, empirically validated by numerous studies and meta-analyses (Creemers, 2005). Twenty-five years after it was developed, its author confirmed it as a process-product model (Carroll, 1989).

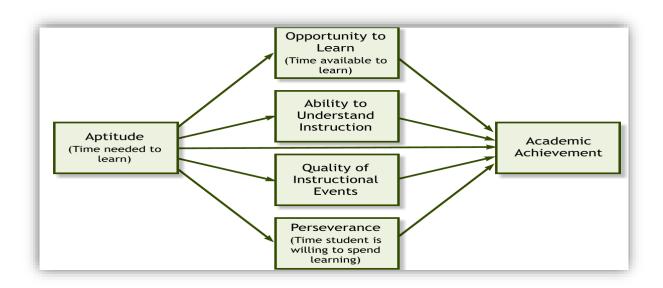


Figure 2.3 Model of School Learning (Carroll, 1963)

Based on learning and contingency theory, the 'Model of School Learning', is a theory of learning and instruction focused on the classroom level (Creemers, 1994). It emphasises the primary process of teaching and learning, with time as the most significant dimension (Scheerens, 2013). The model accounts for variations in learning based on five variables: aptitude – the general learning ability of a student and the time required to learn

a skill or perform a task; opportunity to learn – the time available for learning; ability to understand instruction – student prerequisite knowledge and skills; quality of instruction – effective teaching; and perseverance – the amount of time a student is willing to commit to learning. This model measures output in terms of cognitive outcomes, usually academic achievement in standardised tests, a limited measure as far as not accounting for non-cognitive outcomes (Reeves & Reeves, 1997). Whilst the model recognised that school processes occur at many levels and are interactive and complex, it failed to explain how school conditions contributed to effectiveness through establishing processes that facilitate effective teaching and learning (Willms & Raudenbush, 1989). Nevertheless, the Carroll (1963) model provided the impetus for the development of further theories and models, particularly the integrated models of school effectiveness (Aitkin & Zuzovsky, 1994).

2.1.4.3 Generalist-educationalist approach and integrated models

The research findings that corroborated the production-function and processproduct models were inconsistent (Scheerens & Creemers, 1989). Consequently,
researchers sought to develop more refined models to undertake empirical research which
explained the complex causal structure in schools that influenced student achievement
(Scheerens, 1990). A multi-level model was required to account for factors at different
levels: context, school, classroom, and student (Scheerens, 1993). A theoretical framework
was also necessary to explain how these variables interacted (Bosker & Scheerens, 1994).
This led to the development of the generalist-educationalist approach and integrated
models of school effectiveness, which capture the levels in schools and their interaction
(Aitkin & Zuzovsky, 1994). This approach integrated organisational and learning theory
with the findings of SER, teacher effectiveness research, and earlier input-output studies

(Creemers, 2005). The development of integrated models which emerged from the generalist-educationalist approach, put school effectiveness studies on a firm methodological foundation for the first time (Creemers & Reezigt, 1996).

2.1.4.4 Comprehensive Model of Educational Effectiveness

By the early to mid-1990s numerous integrated or context-input-process-output models of school effectiveness had been developed. They attempted to explain the relationships between factors at different levels and their contribution to student outcomes. These models guided the theoretical development of SER and the design of empirical studies in the field (Creemers & Kyriakides, 2010b). According to Teddlie & Reynolds (2001), the first prominent model of this kind was that of Scheerens (1990), the second from Stringfield and Slaven (1992), and the most influential, Creemers' (1994) Comprehensive Model of Educational Effectiveness [CMEE] shown in Figure 2.4.

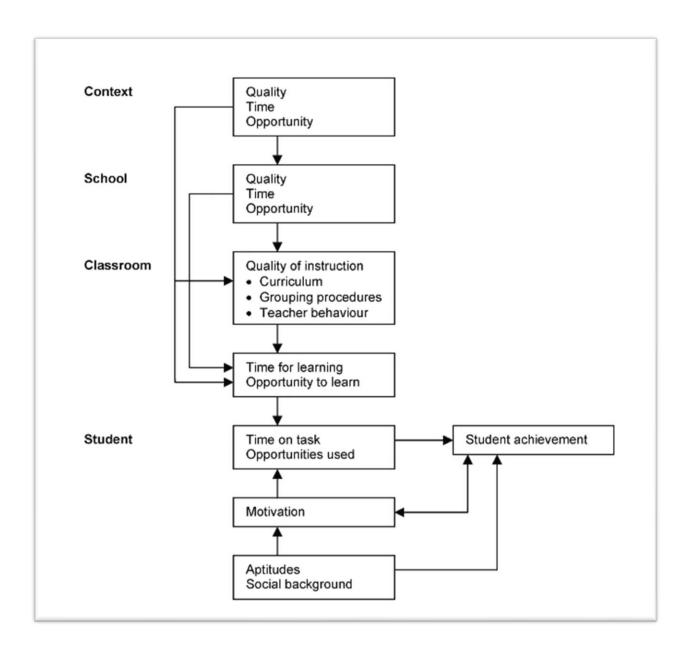


Figure 2.4 Comprehensive Model of Educational Effectiveness (Creemers, 1994)

This model focuses on the classroom level as its core in the same way as the Carroll (1963) model. However, the essential difference between the CMEE and its predecessors is that the latter acknowledges the multi-level influences on student achievement: context, school, classroom, and student intake factors. Additionally, it explains why educational systems, not just individual schools, perform differently (Creemers, 2005).

The CMEE is a conceptual framework containing a multi-level structure: the system level denoted by context, school, classroom, and student level. It is based on learning and organisational theories and attempts to explain the complex interaction between the levels and how this interface contributes to student achievement (Scheerens, 1997). According to the model, the context or system level represents the wider educational context within which schools operate, and influences schools through educational policy related to time on task, opportunity to learn, and quality of teaching and learning, as well as guidelines with respect to a national curriculum. School level variables, such as academic climate, influence classroom factors, such as teacher management of time on task, through policy aimed at creating and sustaining a supportive learning environment that facilitates quality of instruction, time for learning, and opportunity to learn. The school level is conditional in so much as its influence on student achievement is mediated by the classroom level. This model highlights the primacy of the classroom level in terms of its direct influence on student achievement, which is consistent with research in the field undertaken using a multi-level approach. The main finding of this research has been that more variance in student outcomes is attributable to the classroom than the school level (Scheerens, 1997).

The CMEE was based on four assumptions (Kyriakides, 2005). First, factors at the school level: teaching quality, time allocated to learning, and opportunity to learn, influence variables at the classroom level. Second, at the classroom level, quality of instruction influences time on task and the opportunity to learn. Third, at the student level, time on task and opportunity to learn are directly related to student achievement. Finally, despite the influence of teacher quality on time for learning and opportunity to learn, students

ultimately influence their achievement through factors such as aptitude, socio-economic background, time on task, opportunities taken, and motivation.

The CMEE made a significant contribution to the field (Muijs, 2008). First, it progressed understanding of school effectiveness beyond the lists of factors that were prevalent in theoretical models during the 1980s, by attempting to explain the interaction between the factors that contributed to student achievement, giving the CMEE a firm theoretical foundation. Second, it emphasised the importance of theory and model development in terms of testing assumptions and developing school improvement actions based on SER, giving it a practical usefulness. Finally, empirical evidence for the validity of the model was provided by four studies conducted in Cyprus and other European countries (Driessen & Sleegers, 2000; Kyriakides, Campbell & Gagatsis, 2010; Kyriakides, Creemers, Antoniou & Demetriou, 2010; Reezigt et al., 1999).

In addition to providing empirical evidence for the CMEE, the findings of these studies indicated that the influences on student achievement are multi-level, and the relationships between factors at different levels are more complex than initially assumed (Muijs, 2008). They emphasised the dual importance of using multiple measures of effectiveness factors, and conducting longitudinal studies rather than cross-sectional studies, to collect data on the functioning of teacher and school factors, as well as measuring change in the effectiveness of these variables over time (Kyriakides, 2005). However, Creemers (2005) acknowledged that the model lacked a clear conceptualisation of measuring effectiveness factors and the dynamic nature of educational processes.

2.1.4.5 Dynamic Model of Educational Effectiveness

The successor to the CMEE, the Dynamic Model of Educational Effectiveness [DMEE], shown in Figure 2.5, is a comprehensive conceptual framework for establishing a theory-driven and evidence-based approach to school improvement (Creemers & Kyriakides, 2008). According to its authors, integrated models of educational effectiveness did not pay sufficient attention to the dynamic nature of schools and the differential aspect of effectiveness factors. This led to the development of the DMEE, which attempts to explain the dynamic interaction between the multiple factors associated with effectiveness, based on research evidence (Creemers & Kyriakides, 2012). The model provides a more robust conceptualisation of the relationship between educational factors at different levels in a school, as well as the interaction of variables within levels, associated with student achievement. It explains their association and offers a mechanism for measuring each effectiveness factor in relation to qualitative dimensions, as opposed to the exclusively quantitative measures of previous models (Scheerens, 2013).

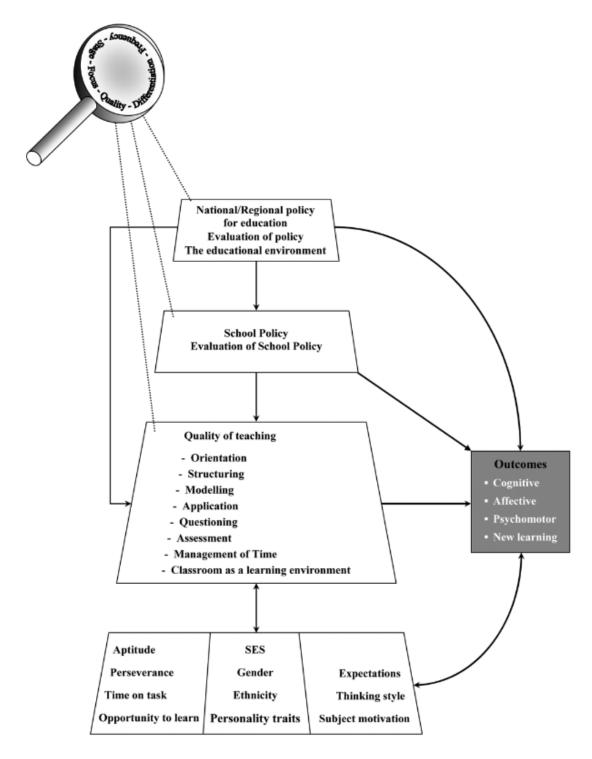


Figure 2.5 - Dynamic Model of Educational Effectiveness (Creemers & Kyriakides, 2008)

The DMEE addresses the influence of contextual factors, external and internal, on school improvement processes, depicted in the highest level of the figure. The framework thus incorporates contingency theory, which also sets it apart from integrated models developed in the 1990s (Creemers & Kyriakides, 2012). In terms of this influence process, the model emphasises school policy at the next level, designed to improve both the learning environment and effective teaching (Creemers & Kyriakides, 2010a). It also focuses on evaluation of policy and actions taken at the school level to improve student achievement.

2.1.4.6 Rationale for the Dynamic Model of Educational Effectiveness

The model attempts to merge the SER and SIR traditions by encouraging the uptake of evidence-based practice in schools (Creemers & Kyriakides, 2015). Its rationale for establishing stronger links between these traditions is as follows. First, it is based on the whole school curriculum, not limited to literacy and numeracy, because the authors believe outcomes should be measured more broadly than achievement in basic skills tests. Thus, it accounts for non-cognitive outcomes such as perseverance. Second, new theories of teaching and learning are used to identify variables linked to effective teaching. Next, the process of interaction between factors at different levels is dynamic and contributes to school improvement. Finally, the model encourages the development of school-based programs and strategies that aim to improve the school learning environment, as well as the quality of teaching at the school and classroom level.

2.1.4.7 Assumptions of the Dynamic Model of Educational Effectiveness

The DMEE is based on several assumptions (Creemers & Kyriakides, 2009). One of the major assumptions of the model is that schools and systems that identify priorities for improvement and develop strategies to address them, can improve the school learning environment and teaching practice. Top down, externally imposed improvement initiatives, indicated in the highest level of Figure 2.5, will have minimal impact, often because school stakeholders do not take ownership of these reforms due to their limited relevance to a specific context. Therefore, schools must identify what matters most for them and act on it. It is assumed that policy makers and practitioners will make rational decisions matching factors within the model to specific contexts, to achieve school or system improvement (Creemers & Kyriakides, 2012).

The DMEE also assumes that factors at the broader contextual and school level, depicted in the two highest levels of Figure 2.5, have direct and indirect effects on student achievement, by influencing school conditions that support teaching and learning. Finally, school improvement is assumed to be an ongoing dynamic process because teaching and learning are constantly adapting to changing needs and opportunities (Creemers & Kyriakides, 2010a). The DMEE illustrates this multi-level and complex nature of school effectiveness processes (Creemers & Kyriakides, 2009). It includes multiple factors of effectiveness which function at different levels: the broader educational context, the school, the teacher, and student. Multiple factors operating at the same level are grouped because they are inter-related. Additionally, factors at different levels are expected to interact with one another. Therefore, the model examines the dynamic relationships between the various effectiveness factors operating at different levels, and their outcome. Considering these variables as multi-dimensional constructs, provides a clear understanding of what makes schools and teachers effective.

2.1.4.8 Characteristics of the Dynamic Model of Educational Effectiveness

As depicted in Figure 2.5, the DMEE treats school effectiveness correlates as a dynamic, rather than static, set of interacting variables operating at four levels: the broader educational context, the school, the teacher, and student (Creemers & Kyriakides, 2015). The highest level in the model refers to the influence of national and regional educational policy on the actions taken at the school level to improve the learning environment, as well as teaching and learning, along with evaluation of these actions (Creemers & Kyriakides, 2012). The model considers research findings which show that school evaluation is an important predictor of school effectiveness (Creemers, Kyriakides & Antoniou, 2013).

The school learning environment is the most important predictor of school effectiveness since learning is the key function of the school. Related to this are the processes and activities which occur at the school level to improve teaching practice and the learning environment (Creemers & Kyriakides, 2009). Therefore, the DMEE includes the following over-arching factors at the school level, shown in the second level of Figure 2.5: school policy for teaching and actions taken for improving teaching practice, evaluation of school policy for teaching and actions taken to improve teaching, policy for creating a school learning environment and actions taken to improve the school learning environment, as well as evaluation of the school learning environment. Leadership is not considered a school level factor because the model is not concerned with who develops and implements policy, but with its consequences. This emphasises the focus of the model on the effects of actions taken, not who takes the actions (Creemers & Kyriakides, 2009).

The DMEE places special emphasis on the classroom level because learning occurs at this level and research has shown this level to contribute the most to student achievement (Kyriakides, Christoforou & Charalambous, 2013; Scheerens, 2013). The two main variables in the classroom, the teacher, and the student, are shown in levels three and four of Figure 2.5. At the teacher level, the DMEE contains eight teacher instructional practices that positively impact student outcomes, based on teacher effectiveness research (Creemers & Kyriakides, 2008). These eight behaviours are summarised in Table 2.2.

Table 2.2 Teacher instructional behaviours related to positive student outcomes

Instructional Practice	Description
Orientation	providing learning objectives for each lesson or task
Structuring	presenting learning objectives, content, and materials in a structured way
Modelling	assisting students to develop problem solving strategies
Questioning	engaging students in discussion through questioning strategies
Assessment	using assessment data to evaluate teaching and plan the next stage of learning
Classroom Learning Environment	creating an environment conducive to learning
Management of Time	time that students spend actively engaged in learning activities
Application	providing opportunities to apply theory to practice through collaborative learning

Policies and actions implemented at the school level to develop a learning environment that facilitates effective teaching and learning are evaluated in terms of the effectiveness of the above teacher practices, hence their importance to the framework.

These practices are informed by teacher attributes, such as qualifications and experience, which are consistent with teacher effectiveness research.

At the student level, the DMEE refers to two main categories of student background factors which may influence student achievement: socio-cultural and economic background, and psychological variables (Creemers & Kyriakides, 2012). The former includes variables such as SES, ethnic background, and gender. The latter includes aptitude, perseverance, and thinking styles. Time on task, which is the time students are willing to spend on learning, is determined by motivation and expectations. Opportunity to learn, which also directly influences student achievement, refers to the learning activities provided by the teacher and school for students to acquire knowledge and skills.

According to the DMEE, different effectiveness factors exist at each level of the model. Each factor can be measured by applying the five dimensions depicted by the magnifying glass shown in Figure 2.5: frequency, focus, stage, quality, and differentiation; at the system, school, and classroom levels. This specific, multi-dimensional framework is used to measure the functioning of factors, considering both their quantitative and qualitative characteristics. Frequency is a quantitative measure of how many times during a calendar year the school collects evaluative data about its policies in relation to improving the learning environment and teaching practice. The other four dimensions measure qualitative characteristics of the functioning of the effectiveness factors. Focus refers to the specificity of school policy on improving the learning environment and teaching. Stage denotes the period in which evaluation data is collected. Quality indicates the reliability and validity of the instruments employed to collect data. Differentiation is the

extent to which the school places emphasis on evaluating specific aspects of its policy for teaching (Kyriakides & Creemers, 2009).

2.1.4.9 Empirical evidence for the Dynamic Model of Educational Effectiveness

Five longitudinal studies and two meta-analyses have been conducted to test the main characteristics and assumptions of the DMEE (Creemers & Kyriakides, 2012). A longitudinal study (Kyriakides & Creemers, 2008) measuring school and teacher effectiveness in Mathematics, Greek language, and Religious Education, found that school level and classroom factors can be defined by reference to the five dimensions of the model: frequency, focus, stage, quality, and differentiation. A study (Kyriakides & Creemers, 2009) investigating the impact of teacher factors on the achievement of students at the end of pre-primary school in Cyprus, found that seven of the eight teacher behaviours produced moderate effect sizes in terms of their impact on student achievement. Further evidence for the validity of the model at the school and classroom levels has been provided by two 'follow up' European studies (Creemers & Kyriakides, 2010b; Kyriakides et. al., 2014), and one Canadian study of seven primary schools (Janosz et. al., 2011).

The above studies have provided support for the multi-level nature of the DMEE, since factors operating at different levels were found to be associated with student achievement gains. They also revealed that school and teacher factors included in the model are positively associated with student outcomes (Creemers & Kyriakides, 2015). Additional empirical evidence supporting the assumption that school and teacher level factors have an impact on student achievement, has been provided by two meta-analyses. A quantitative synthesis of 67 studies exploring the impact of school factors on student achievement (Kyriakides et al., 2010), and another of 148 studies investigating the impact

of teacher behaviours on student outcomes, found that effective schools develop policies and implement actions to improve the learning environment and teaching practice (Kyriakides et al., 2013). Nevertheless, further research is required in a range of different countries, outside of Europe and North America, particularly in secondary schools, to test the generalisability of the findings of these studies (Creemers & Kyriakides, 2015).

On another note, an important one in the context of this thesis, is a gap in the DMEE in its omission of the role of leadership in achieving school effectiveness and improvement. Whilst the model discusses leadership policy, it does not account for the role of leadership at the school level in terms of creating a learning environment and improving teaching to facilitate effective learning. As discussed in Chapter One, leadership plays a key role in school effectiveness and improvement (Muijs et al., 2014). International research shows that leaders are critical in creating the conditions that support the work of teachers (Day & Sammons, 2013). Therefore, leadership practices at the school level which contribute to student outcomes is worthy of investigation. This type of inquiry can result in the development of a theory-driven, evidence-based approach to leading school effectiveness and improvement. This can in turn lead to school leaders taking up these practices, as well as further testing and development of leadership theory and practice.

2.1.4.10 The Dynamic Approach to School Improvement

The DMEE has become the dominant conceptual model in the field due to its theory-driven and evidence-based approach to school improvement (Muijs et. al., 2014). This prompted the authors of the model to encourage schools and systems to employ it to inform improvement of the learning environment and teaching practice as a means to achieve higher student achievement (Creemers & Kyriakides, 2012). The architects of the

model subsequently developed the Dynamic Approach to School Improvement [DASI], a theory driven, evidence-based framework which operationalises the DMEE (Creemers & Kyriakides, 2015). The aim of the framework, shown below in Figure 2.6, is to improve the functioning of factors associated with learning outcomes, such as the school learning environment and teaching practice, by way of increasing student achievement.

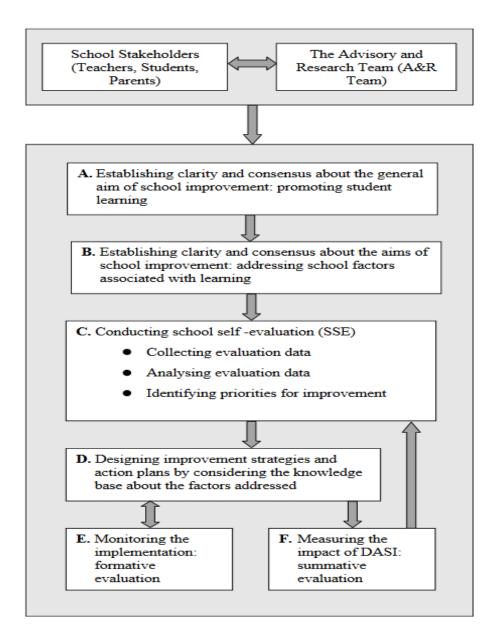


Figure 2.6 Dynamic Approach to School Improvement (Creemers & Kyriakides, 2012)

As illustrated in Figure 2.6, the DASI, is based on several assumptions. It is assumed that collaboration between School Stakeholders and the Advisory and Research Team is critical to the success of school improvement projects. Accordingly, they are actively involved in each step of the process. It is also assumed that school improvement efforts are continuous, cyclical in nature, and embedded in a wider process of overall school development. The DASI emphasises that improvement efforts should target the school level because factors at this level are expected to have direct and indirect effects on student learning outcomes (Creemers & Kyriakides, 2012).

The main features of the framework are as follows. The DASI promotes the design of school improvement initiatives that are based on an empirically tested theoretical framework, the DMEE, which found that the success of school improvement projects is contingent upon school level processes. As shown in the top tier of Figure 2.6, School Stakeholders and the Advisory and Research Team interact in the design, implementation, and evaluation of the school improvement project, based on the collection of data to inform school needs and priorities for improvement. Another major dimension of the DASI is its emphasis on the role of re-iterative evaluation in improving the effectiveness of the school. Importantly, the framework acknowledges that school improvement strategies must be contextualised for the DASI to be effective (Creemers et al., 2013).

The DASI acknowledges enhancing student learning as the core aim of school improvement. It therefore provides a systematic approach to school improvement in six steps. The first phase, indicated by the letter A, is the identification of priority areas of improvement, based on increasing student achievement gains. The second, involves taking rational decisions to implement evidence-based actions to improve priority areas,

specifically teaching and learning. The emphasis here is on creating the school level conditions that facilitate continuous improvement of teaching practice which is positively associated with learning outcomes. The third step focuses on the collection and analysis of data to identify specific priorities for improvement. It also involves engagement of the entire school community in the pursuit of these goals. The fourth step comprises the design of school improvement strategies and action plans. The penultimate step is implementing the improvement blueprint and the establishment of evaluative mechanisms. The final step measures the impact of school improvement strategies. Evaluative data leads to the recommencement of this recursive cycle (Creemers & Kyriakides, 2012).

Four experimental studies have been conducted to investigate the impact of the DASI on improving learning outcomes (Antoniou & Kyriakides, 2011; Christoforidou, 2013; Demetriou & Kyriakides, 2012; Kyriakides et. al., 2014). These studies found that the DASI was implemented to improve the functioning of school level factors to achieve different outcomes for students. They also revealed, the DASI has a stronger impact on improving student achievement than the approach to school improvement based solely on the professional learning of teachers (Creemers & Kyriakides, 2015). However, these authors note, the DASI was accepted voluntarily in the schools in which it was deployed, as part of an internally driven reform strategy to improve student achievement. They acknowledge that the framework may not necessarily be effective in a school where it is imposed in a 'top-down' manner. They also concede that the above studies took place in pre-primary and primary schools in European countries, thereby recognising the need for further research in secondary school settings, particularly in non-European countries (Creemers & Kyriakides, 2015).

2.2 School Improvement Research

In broad terms, school improvement is "a strategy for educational change that enhances student outcomes as well as strengthening the school's capacity for managing change" (Hopkins, Ainscow & West, 1994, p. 3). It is concerned with developing and sustaining infrastructure and school level conditions that facilitate effective teaching and learning (Reynolds et al., 1993). Whereas SER is directed at identifying the factors that contribute to school effectiveness, SIR is oriented toward investigating the implementation of policies and practices aimed at improving schools (Creemers & Reezigt, 2005). The point of difference between these research traditions is emphasised by Chapman, Muijs, Reynolds, Sammons and Teddlie (2016). On the one hand, "SER has sought to establish what makes schools 'good' or enables them to add value to their students, seeking to describe all of the factors, within schools in particular, and education systems in general, that might affect the learning outcomes of students in both their academic and social areas" (p. 1). On the other hand, "SIR has sought to establish how both schools and teachers can be made 'good', as it were, by means of studying how these knowledge bases relate to processes within schools and classrooms to improve student academic and social outcomes" (p. 2).

The transition from research and theory to school improvement interventions occurred initially in the US in the 1980s (Mortimore, 1991) and subsequently spread to many countries throughout the world, including the UK, New Zealand, and Australia (Murphy, 1992). This evolution represented several paradigm shifts summarised in Table 2.3 (Reynolds et al., 1993).

Table 2.3 *School effectiveness and school improvement traditions compared*

School effectiveness	School improvement
Focus on schools	Focus on individual teachers or groups of teachers
Focus on school organisation	Focus on school processes
Data driven, with emphasis on outcomes	Empirical evaluation of effects of changes
Quantitative in orientation	Qualitative in orientation
Lack of knowledge about how to implement change strategies	Concerned with change in schools exclusively
More concerned with change in pupil outcomes	More concerned with journey of school improvement than its destination
More concerned with schools at a particular point in time	More concerned with schools as changing
Based on research knowledge	Focus on practitioner knowledge

Analysis of data in Table 2.3 reveals that the SER and SIR traditions are theoretically and methodologically different. The former defined effectiveness at a whole school level and sought to identify the factors associated with an effective school, in order to compare schools. The latter is concerned with how schools can become more effective by focusing on improving their internal conditions and processes at various levels, particularly the school level which is the centre of change and where ownership of it occurs. It also has a classroom practitioner emphasis rather than initiatives driven by policy makers. Further to this focus, school improvement strategies are informed by qualitative data used to evaluate student outcomes. On the other hand, the former is focused on quantitative measures of outcomes, such as student achievement and attendance.

Additionally, school improvement is a systematic approach to change, managed over several years. As opposed to this longitudinal perspective, school effectiveness presented a snapshot of a school at a particular point in time. Overall, lack of synchronicity between the traditions led to calls for a merged, integrated approach to school improvement based on the school effectiveness knowledge base (Reynolds et al., 1993). The architects of the DMEE claimed that this model was developed to establish stronger links between the SER knowledge base and school improvement practice (Creemers & Kyriakides, 2012).

2.2.1 School improvement phases

Three distinct phases which overlap and blend organically, have been identified in the school improvement literature (Hopkins, Stringfield, Harris, Stoll & Mackay, 2014). The first, in the late 1970s and 1980s; the second, in the 1990s; and the third, continuing in the 2000s. The first phase, consisting of school level initiatives categorised as fragmented and non-strategic, has been referred to as "free floating" (Hopkins, 2013, p.459). As a result, they had limited impact on student outcomes (Townsend, 2001). Also, the programs were not sustained, ceasing when funding was discontinued, or a school leader left the institution (Hopkins, 2013).

Substantial external pressure to improve schools was a salient characteristic of the second phase (Hopkins & Reynolds, 2001). It comprised centrally driven reform, embedded within education policy (Leithwood, Jantzi & Steinbach, 1999). This phase witnessed the implementation of national literacy and numeracy strategies, and national testing regimes. It also gave rise to the establishment of curriculum frameworks to support school improvement strategies, standards to determine progress, league tables published in the public domain, and central accountability agencies (Leithwood & Duke, 1999). During this

phase, the SER and SIR traditions became closely aligned, producing strategies and guidelines for improvement based on the knowledge base of the former (Hopkins, 2013).

The emphasis of reform during the second phase shifted from the school level to classrooms and focused particularly on improving teaching and learning (Townsend, 2001). This shift to the instructional level was based on two decades of SER findings which showed that processes and conditions at the school level have an indirect influence on learning outcomes through supporting instruction (Creemers & Reezigt, 1996). The focus of school improvement initiatives, at the level of the classroom practitioner, was based on the recognition that the teacher is strategically placed to directly influence student achievement (Scheerens, 1990). As was noted earlier in this chapter, teacher effectiveness research identified eight teacher instructional practices that positively impact student outcomes; orientation, structuring, modelling, questioning, assessment, classroom learning environment, management of time, and opportunities to apply theory to practice. These teacher behaviours are integrated into the DMEE (Creemers & Kyriakides, 2008) and the conceptual framework developed for this thesis.

School improvement approaches in the third phase, focused on developing synergy between the school and classroom levels, accounting for context (Hopkins, 2013), an important advancement. At the school level, they consisted of vision building, cultural change, and implementing processes to facilitate effective teaching and learning to achieve sustained school improvement. At the instructional level, the focus was on building capacity in individual teachers and faculties, as well as using data to drive school improvement (Hopkins & Reynolds, 2001). According to these authors authentic school improvement programs from any of the three phases, focus relentlessly on learning and

student achievement, in a broader sense than mere examination results or test scores. The characteristics of these programs are summarised in Table 2.4.

Table 2.4 Authentic school improvement programs (Hopkins, 2001)

Characteristic	Description
Empowering	Provide stakeholders with change management skills and confidence
Research based and theory rich	Strategies and programs are based on research evidence
Context specific	Strategies are based on the unique features of the school
Capacity building in nature	Build organisational conditions that support continuous improvement
Enquiry driven	Reflection on practice is integral to the improvement process
Implementation oriented	Direct focus on the quality of classroom practice and student learning
Interventionist and strategic	Plan and prioritise change with a medium-term view
Externally supported	School agencies and networks provide support to sustain good practice
Systemic	Adapt external policy to internal priorities using the resources of the system

The contents of Table 2.4 can be summarised as follows. First, school improvement requires community involvement and responsibility to establish a whole school approach. Second, school improvement strategies, whilst aligned to external policies, must focus on specific context-based priorities. Third, these strategies are designed to improve student learning by focusing on enhancing classroom practice through ongoing professional

learning. Next, these strategies are informed by data and grounded in research. Finally, organisational conditions are built to support continuous improvement, particularly instructional and change management capacity.

2.2.2 School improvement approaches

Three main school improvement approaches have been identified in the literature (Harris, 2002). The first approach involved integrating externally driven and school-based priorities, placing the school at the centre of change, establishing educational goals for the school, strategically planning and implementing change, creating a school improvement mindset, aligning all levels and stakeholders to the process of school improvement, and developing the internal conditions of the school to facilitate improvement (Hopkins, 1987).

The most prominent project within this approach was the International School Improvement Program [ISIP] 1982-1986, coordinated by the OECD and involving 14 countries (Mortimore, 2001). ISIP was multi-level in design, focusing simultaneously on the school level to establish positive conditions to support learning, and the classroom level to facilitate effective teaching. This school-based model influenced subsequent approaches to school improvement, emphasising that strategies must impact different levels of the school concurrently to produce sustained improvement (Hopkins, 2013).

A second school improvement approach was system-based. According to this framework, the school initiated and owned school improvement, with external support from the system. The Local Education Authority [LEA] systemic model operating in London from 1986-1990 was the best-known partnership between schools and their local education authority (Harris, 2000).

A third approach emphasised that school improvement is premised upon building internal capacity for sustained improvement (Harris, 2000; Hopkins & Jackson, 2003). Improving the Quality of Education for All [IQEA] was a program established in fifty schools across England and Wales in 1990 and is the most renowned example of this school-based, capacity building model (Hopkins & Ainscow, 1993).

School improvement in the 2000s based on the third model, has focused on enhancing and sustaining student outcomes through professional capacity building at four levels: teacher, leadership, school, and system (Hopkins, 2009). Stoll (2009) defined capacity as "a power, a 'habit of mind' focused on engaging in and sustaining the learning of people at all levels . . . for the collective purpose of enhancing student learning" (p.125). This definition, and others, such as that provided by Marzano, Waters and McNulty (2005), concentrated narrowly on developing the skills of individuals within the school. Some scholars, as discussed below, broaden the concept of capacity building to the organisation as well.

According to Hallinger & Heck (2010a), building school improvement capacity refers to enhancing the school conditions that support teaching and learning, enabling the professional learning of teachers, and providing a means for implementing strategic actions aimed at continuous school improvement. Similarly, Harris (2001) defined capacity building as creating the conditions, opportunities, and experiences for collaboration between leaders and teachers, leading to mutual learning about how to improve student achievement. This mutual learning is most effective when it occurs within a vibrant professional learning community (Crowther, 2010).

As the school improvement tradition progressed in the twenty first century, reform efforts focused on enhancing student learning through implementing school-based processes aimed at improving pedagogical practice by way of teacher professional learning (Hopkins, 2001). This strategy was influenced by the empirical evidence supporting the view that classroom level factors, particularly instructional quality, have a greater influence on student achievement than school level variables (Reezigt & Creemers, 2005).

Consequently, the pursuit of higher student achievement led to a focus on building school capacity to support teaching and learning as the cornerstone of school improvement (Fullan, 2004; Hopkins, 2009).

2.2.3 School Improvement Research findings

SIR findings over the past three decades have shown that schools on a significant improvement trajectory, simultaneously implement key interventions to increase student achievement (Harris, 2002). The focus is first and foremost on improving the quality of teaching which has been shown to have three to four times the effect on student academic achievement than any other school variable (Hattie, 2009). To achieve this goal, reform efforts are concentrated at the classroom level to influence teacher behaviour and improve instructional quality (Creemers, 1994). In particular, the focus is on building professional learning communities, often in faculties, securing teacher commitment to develop practice (Stoll, 2009). A professional learning community [PLC] is defined as, "a group of teachers, motivated by a shared learning vision, who support and work with each other to improve their practice and enhance all student learning" (Stoll et al., 2006, p.1). Professional learning in communities is driven by the finding that reform strategies focused on the

classroom level, aimed at building teacher capacity, are more likely to sustain improvement, than emphasis on variables at the school level (Hopkins & Reynolds, 2001).

The second finding of SIR is that organisational change and development have been shown to be integral to school improvement. Improving schools have recognised the importance of developing school culture to support learning (Creemers, 2002; Yiasemis, 2008). To this end, they have successfully created a learning organisation with a culture that prioritises learning above other outcomes. Additionally, they have established partnerships with parents and the broader community, forming a synergy in pursuit of their improvement agenda, and recognising that school improvement is influenced by external context as well internal factors such as a strong academic culture.

Third, SIR findings have emphasised the importance of leadership in building the optimal conditions to facilitate school improvement (Hallinger & Heck, 1998; Leithwood, Seashore Louis, Anderson & Wahlstrom, 2004). More importantly, leaders of improving schools, take charge of the change and development of their schools, often resisting externally mandated change due to its de-contextualised nature. Finally, leaders of improving schools acknowledge that there is "no one blueprint for action" (Harris, 2002, p. 11). They reject the 'one-size-fits-all' approach to school improvement, relying instead on intervention strategies customised to the particular stage of their school on its improvement journey (Hopkins, 2013).

Schools that improve and continue to do so, have been found to develop the school as a learning organisation where members constantly promote change and development, continually seeking new ways of improving their practice (Harris & Lambert, 2003). The concept of schools as learning organisations was adapted from the work of Senge (1990)

who defined a learning organisation as one which facilitates the learning of its members and continuously transforms itself in order to keep improving. According to Jaquith (2013), the role of school leaders is to create a learning organisation that facilitates the building of instructional capacity. Therefore, at the school level, it is incumbent upon leaders, who are strategically placed to influence the school's overall capacity for change and development (Bolam et al., 2005), to transform school culture, conditions, and processes to support teaching and learning (Harris, 2001; Day et al., 2010).

According to this paradigm of school improvement, leadership is essential for building organisational capacity at the school level (Masters, 2011) and at the level of the teacher (Stoll, 2009). A wide range of studies has shown that leaders directly influence school conditions which positively impact teacher professional learning, which is critical to the improvement of instructional practice and student outcomes (Printy & Marks, 2006; Thoonen, Sleegers, Oort, Peetsma & Geijsel, 2011). Empirical research has found that successful school leaders create conditions and processes that support effective teaching and learning, as well as build capacity for change and improved instruction (Hallinger & Heck, 2010a; Leithwood, Day, Nixon, Harris & Hopkins, 2006). The findings of SIR over the last three decades are summarised in Table 2.5.

Table 2.5 Summary of key findings from School Improvement Research

Finding	Focus
Classroom level is more important than the school level in improving student outcomes	Teacher
Teachers represent the biggest in school influence on student achievement	Teacher
Improving schools build instructional capacity individually and collectively in professional learning communities	Teacher
Leadership is essential for building organisational capacity at a school level and at the level of the teacher	School and teacher

As illustrated in Table 2.5, the findings emphasise the requirement for school improvement strategies to be multi-level. Teaching and learning occur at the classroom level. Therefore, it is critical to facilitate the development of instructional practice.

Leadership is also a crucial factor in terms of contextualising reform, developing the organisational culture and conditions to support teaching and learning, and developing instructional capacity and quality, which will potentially make the biggest difference to student achievement.

2.2.4 Criticisms of School Improvement Research

Despite the usefulness of SIR findings to researchers, policy makers and practitioners, several limitations in the field have been emphasised by various scholars. These limitations relate to issues of a theoretical, methodological and policy nature. On a conceptual level, a limitation has been the lack of theoretical models and testing of hypotheses to inform school improvement strategies (Gray, Hopkins, Reynolds, Wilcox, Farrell & Jesson, 1999; Hopkins, 1995). The lack of attention to the systematic testing of theories on how to improve schools was reiterated by the authors of the DMEE (Creemers

& Kyriakides, 2012). Criticism on this front led to recommendations for this research tradition to be more rigorously conceptualised and tested (Harris, 2000).

On a methodological level, and reminiscent of the criticism of SER on a broad scale, the research has been conducted mostly in western settings, particularly in North America, Great Britain, Australia, Canada, New Zealand, the Netherlands, and Scandinavia (Murphy, 2013; Yiasemis, 2008). Consequently, there have been numerous calls for further research to be conducted in other countries to provide a balanced global perspective (Huber & Muijs, 2010). Additionally, the research base needs to be broadened because much of it has been undertaken in poor performing schools in predominantly disadvantaged urban areas (Bendikson, 2011). Also, on a methodological basis, there has been criticism of the paucity of longitudinal data in SIR (Hallinger & Heck, 1996a). Longitudinal data is required to gain an insight into the effects of leadership on student achievement over time (Hallinger & Huber, 2012; ten Bruggencate, Luyten, Scheerens & Sleegers, 2012).

On a policy level, the second phase of school improvement has been the focus of criticism over the years. Centrally driven reform such as the 'No Child Left Behind' policy in the US, which was characteristic of this phase, was seen to be highly prescriptive and undifferentiated in nature, therefore not accounting for either contextual factors or schools at different stages in their improvement journey (Hopkins, 2013). It is imperative that school improvement strategies be differentiated because interventions are not equally beneficial for all schools, irrespective of their level of effectiveness or stage in the improvement journey (Harris, 2000).

Some reforms maintained a single level perspective, usually at the school level.

Consequently, they failed, on the one hand to consider the complex nature of schools and

change management. On the other hand, they did not focus on the classroom level which accounts for greater variance in student achievement than the school level (Creemers, 1994). As a result, the impact on student achievement was limited (Hopkins, 2013). Integrated models of SER emphasised the importance of a multi-level approach to school improvement because change must occur at all levels (Harris, 2000), particularly building organisational conditions and culture, as well as instructional capacity, to sustain improvement (Hopkins & Reynolds, 2001). Therefore, a multi-level perspective needed to be taken in school improvement initiatives.

2.3 The importance of leadership to school improvement

This section first defines school leadership before examining its relationship to school improvement. Despite the substantial volume of leadership literature, there is no agreed upon definition of school leadership among those in the field (Harris, 2005; Stewart, 2006). However, common to many definitions of school leadership, is the concept that it involves a process of influence, leading to the collective alignment of organisational members to a stated purpose (Bush & Glover, 2003). According to the definition adopted for this thesis, school leadership "is an influence process through which leaders identify a direction for the school, motivate staff, and coordinate an evolving set of strategies toward improvements in teaching and learning" (Heck & Hallinger, 2009, p. 662). This definition has been adopted because it incorporates the concept of leaders aligning stakeholders to a vision to improve instruction and student achievement, which is consistent with the research questions investigated in this thesis.

The interest in and focus on school leadership has increased dramatically in the last three decades due to several reasons (Huber & Muijs, 2010; Robinson, 2007). First, it

emerged from a focus on the importance of leadership to the success of organisations in the corporate sector (Hallinger & Huber, 2012). Second, and more importantly, key findings from SER and SIR consistently emphasised that leaders are critically important to school effectiveness and improvement because they are uniquely placed to exercise the most influence on school conditions and teachers (Leithwood & Mascall, 2008; Seashore Louis, et al., 2010). One such finding was that heads of school are the main source of leadership. They influence culture, processes, staff motivation, commitment, and teaching practices that lead to improved student achievement (Day et al., 2009). Another finding was that schools cannot improve without effective leadership because it influences performance more than any other variable, except quality of teaching and student intake factors (Barber, Whelan & Clark, 2010). Another study reported that leaders who enhance student learning, systematically develop teacher quality, set high expectations, allocate resources strategically, and manage the curriculum effectively (Pont, Nusche & Moorman, 2008).

According to Hallinger (2011), all leadership is aimed at improving student learning, albeit, through different mechanisms and paths. Leaders create a school wide focus on teaching and learning, develop the school culture and environment, motivate teachers, and build their capacity (Dufour & Mattos, 2013). They also create high expectations, and engage parents and the community in the school improvement agenda (Jensen & Sonnemann, 2014). Finally, school leaders provide learning opportunities for all students, thereby improving equity in education (Pont et al., 2008).

School leadership has consequently become a priority policy area internationally (Huber & Muijs, 2010). However, in the past three decades, debate has continued in relation to the most suitable model of leadership, in terms of its contribution to school

effectiveness and improvement (Stewart, 2006). Educational theorists and researchers have subsequently conceptualised leadership in various ways, to understand its relationship with student achievement. "There are nowadays a myriad of leadership styles and models of leadership" (Pietsch & Tulowitzki, 2017, p. 1). These conceptual styles and models have been used extensively to investigate the influence of leadership on student achievement (ten Bruggencate et al., 2012).

2.3.1 Instructional leadership

The instructional leadership model emerged in the early 1970s and 80s from the SER tradition (Stewart, 2006; Sun & Leithwood, 2015). It is specific to schools and focuses on academic goals, curriculum, instruction, the learning environment, and developing teachers (Goldring & Pasternak, 1994). The role of instructional leadership is to align school structures and processes to improving the quality of student outcomes (Hallinger & Heck, 1999). Hallinger (2003) developed the most widely referenced conceptualisation of instructional leadership, as a top-down model driven by the principal (Shatzer, Caldarella, Hallam & Brown, 2013). According to this model, the principal defines the school's mission, promotes a positive school learning culture, and manages the instructional program. Hallinger and Heck (2009) found that successful instructional leaders contribute to student achievement indirectly through influencing people, structures, and processes in the school, over time.

SER focused global attention on instructional leadership, which influenced much of the international thinking about effective principal leadership in the 1980s and 1990s (Hallinger, 2003). It was the most common theory of leadership and the model of choice throughout that period because it was considered crucial to school improvement, due to its

emphasis on the coordination and supervision of curriculum and instruction (Hallinger & Heck, 1996b). Instructional leadership influenced teaching and learning in three ways: directly by personal intervention, indirectly through others, and reciprocally by working alongside others (Hallinger & Heck, 1999). It involved practices such as principals directly creating a learning culture, promoting discussion about improving instruction, emphasising data analysis for curriculum improvement, observing classroom practices, and setting improvement targets (Heck, 1992a). Leading the instructional program of a school on a broader level also included providing the human, financial and physical resources to facilitate enhanced instruction (Marzano et al., 2005).

The prominence of instructional leadership was based on general acceptance by the education community that instructionally focused principals made a difference to student outcomes (Robertson & Timperley, 2011). It soon became "increasingly accepted globally as a normative expectation in the principalship" (Hallinger & Wang, 2015, p. 15). However, instructional leadership is not a precise model of leadership that has consistent empirical support (Leithwood & Jantzi, 2006). In fact, there is a paucity of empirical studies that describe the behaviours of effective instructional leaders and their influence on teachers and classroom instruction (Blase & Blase, 1999). Nevertheless, two leading scholars in the field found that principal instructional leadership has an indirect relationship to student achievement, mediated by in-school factors such as climate, culture, and instructional program, which are directly linked to student outcomes (Hallinger & Heck, 1996a). One notable study found that the average effect of instructional leadership on student outcomes was three to four times that of transformational leadership (Robinson, Lloyd & Rowe, 2008). A study in the US, involving 590 teachers in 37 elementary schools, supported the

finding of this research that instructional leadership has a bigger effect on student outcomes than transformational leadership (Shatzer et al., 2013).

Notwithstanding these findings, there has been some criticism of this conceptualisation of leadership. According to Stewart (2006), the limitation of this model is that the principal is not the instructional expert, particularly in secondary schools, where they often focus on tasks other than leading the curriculum. This perspective is supported by a review of leadership literature which reported that principal instructional leadership is weaker in secondary schools than elementary schools (Wallace Foundation, 2013). "The reality is that typical principals do not provide sufficient instructional leadership" (Printy et al., 2009, p.508). This responsibility is often delegated to executive teams, HODs, and teacher leaders (Leithwood & Duke, 1998), due in no small part to the work intensification of principals. One study of secondary school principals' time use found that they spent 27% of their time on administration, 21% on organisation management, 15% on staff management, and only 6-7% on managing the instructional program (Horng, Klasik & Loeb, 2009). These findings indicate that the principal is not the main instructional leader in a secondary school.

Instructional leadership was criticised on this and other fronts. It was considered principal-centric, thereby failing to explore other sources of leadership such as the executive team, HODs, and teacher leaders (Bush, 2013). It was also criticised for being teacher-centric, focusing on teaching rather than learning, and neglecting other organisational factors such as culture and staff motivation, which are important to school improvement (Bush & Glover, 2014). For these reasons, stakeholders in the education

sector became dis-satisfied with the instructional leadership model, which was consequently superseded by the transformational leadership prototype (Leithwood, 1992).

2.3.2 Transformational leadership

The scholars most closely associated with transformational leadership are Burns, Bass, Avolio, and Leithwood, each making a significant contribution to its conceptualisation (Stewart, 2006). Transformational leadership was originally conceptualised in non-educational contexts by Burns (1978). Writing in the Management field, he established the concept of the leader and follower relationship. He defined 'transforming' leadership as a process whereby leaders inspire and motivate followers to achieve organisational goals ahead of their own. This phenomenon occurs 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 (Burns, 1978). This style of leadership then is of mutual benefit to leader and follower.

Bass (1985) built on this theory by explaining the psychological factors that underpin transformational leadership, identifying three ways in which leaders transform followers: increasing their awareness of task importance, focusing them on organisational goals, and meeting their higher order needs. Bass (1998) subsequently developed a leadership model to explain how leaders act to increase the level of commitment from followers. Bass and Avolio (1994) developed the two-factor theory of leadership to explain how transactional and transformational leadership interact to meet organisational goals. These scholars identified four practices transformational leaders implement to engage followers to achieve organisational goals: inspirational motivation, individualised consideration, idealised influence, and intellectual stimulation.

Transformational leadership was adapted from the business world to schools by Leithwood who modified the four I's identified by Bass and Avolio (1994) to develop the 'Transformational Model of School Leadership' (Goldring & Pasternak, 1994). Leithwood (1994) defined this conceptualisation of leadership as a process that transforms stakeholders by motivating them to achieve organisational goals ahead of individual goals (Leithwood & Sun, 2015). This transformation is achieved by leaders who articulate a common vision, build trust, foster collaboration, empower and nurture followers, and thereby inspire them to serve the organisation (Hallinger, 2003). According to the Leithwood (1994) model, transformational leadership focuses on enhancing school climate and culture to facilitate improvement. School leaders achieve this by attending to all staff (individualised consideration), problem solving creatively (intellectual stimulation), establishing high expectations for staff and students (inspirational motivation), and providing a model for teacher standards (idealised influence).

In a subsequent iteration of the model, Leithwood & Jantzi (2000) identified three core leadership functions of transformational leaders: defining the school mission (setting clear goals and communicating them to stakeholders); managing the instructional program (supervising and evaluating instruction, coordinating the curriculum, and monitoring student progress); and creating a positive school culture (protecting instructional time, promoting professional development, maintaining high visibility, and incentivising teaching and learning through rewards). The earlier transformational leadership model was revised by Leithwood and Riehl (2003) to include a fourth and final practice, developing people, to the three previous functions: setting directions, re-designing the organisation, and managing the instructional program. Setting directions involves

developing a school improvement agenda among stakeholders. Developing organisational culture refers to aligning everything in the school to the improvement agenda. Developing people comprises building teacher capacity to achieve the improvement agenda. Managing the instructional program encompasses focusing on teaching and learning as the core business of the school. A study by Leithwood et al. (2004) found that successful school leaders improve teaching and learning indirectly through their influence on staff motivation, commitment and working conditions. The study also found that school leaders implement the same core leadership practices in different contexts as shown in Table 2.6.

Table 2.6 *Core leadership functions* (Leithwood & Riehl, 2003)

Core leadership functions	Description
Setting directions	creating a compelling sense of purpose in the school by developing a shared vision about learning, building consensus about goals and articulating high expectations of teachers' work
Developing organisational culture	building a collaborative school culture, encouraging participation in decision-making, building partnerships with parents and the wider community; alignment of everything in the school to the improvement agenda
Developing people	supporting colleagues' ideas and initiatives, providing intellectual stimulation, modelling important values and practices, and developing teacher capacity through professional learning
Managing the instructional program	designing the curriculum appropriately, providing support for teaching and learning, buffering staff and students from distractions, enhancing teaching and learning through staffing and resource allocation, and fostering stability in the school

Transformational leadership, similar to instructional leadership, focuses on improving student outcomes. However, its emphasis is on motivating staff to facilitate instructional improvement as well as creating the conditions that support effective teaching and learning (Printy et al., 2009). It became increasingly popular in the educational community in the 1990s because of its potential to develop higher levels of

motivation and commitment of stakeholders (Bush & Glover, 2003), and for leaders to work with others in the community to achieve school goals (Blasé & Blasé, 1999).

Leithwood (1994) forecast that transformational approaches to leadership would be especially appropriate to the challenges facing schools in the third millennium, because they enhance climate and culture to support enhanced teaching practices which facilitate improved student achievement. Transformational leadership is also required to secure the commitment of teachers to improve student outcomes (Hallinger, 2009). For these reasons, it was claimed that transformational leaders are best placed to lead school improvement (Leithwood, 1994). This leadership theory has been associated with leaders as agents of change in schools, undertaking substantial reform resulting in positive outcomes in the school environment and staff motivation (Macneil, Prater & Busch, 2009). Leithwood and Jantzi (2005) claim that transformational leadership is ideal in schools where principals are undertaking substantial reforms because effective change management is considered an attribute of transformational leaders. Marks & Printy (2003) claimed that transformational leadership is a critical prerequisite for instructional leadership in terms of laying the groundwork for the latter through the following aspects: challenging teachers to reflect on their practice, inviting teachers to innovate, motivating and supporting teachers, creating better work conditions, and engaging teachers in collaborative decision making.

Despite these claims, the empirical evidence relating to the direct or indirect influence of transformational leadership on student achievement is inconclusive. A European study found that transformational leadership had strong direct effects on teachers' work environment and motivation (Thoonen et al., 2011). A study conducted in

the US reported that transformational leadership had a stronger impact on teacher motivation and school conditions than student achievement (Leithwood & Jantzi, 2006). Other research showed that transformational leadership has a small but statistically significant positive effect on teachers' classroom practices, mediated by school culture, teacher commitment, motivation, and capacity (Leithwood & Jantzi, 2005).

However, after more than a decade of conducting studies of transformational school leadership, Leithwood concluded that the model failed to capture fully, the features that explain successful leadership in school settings (Hallinger, 2009). The same researcher concluded that transformational leadership, in and of itself, is of limited value (Hallinger, 2003). Other scholars have highlighted major limitations in this model. First, transformational leadership by itself is inadequate in terms of achieving high quality teaching and learning because it lacks an explicit focus on curriculum and instruction (Bush, 2007). Additionally, due to lacking this specific emphasis on teaching and learning, transformational leadership alone is an insufficient condition for measurable school improvement (Hopkins et al., 2014). Second, teachers can be manipulated into supporting a charismatic principal's vison or policies, which could lead to a lack of ownership of and genuine commitment to the school improvement agenda (Bush & Glover, 2014).

Whilst the core leadership practices of the model (Leithwood & Riehl, 2003) have stood the test of time, transformational leadership has been subsequently integrated into other conceptualisations of leadership in educational settings (Stewart, 2006). Printy et al., (2009) argued for a more integrated approach to leadership on the basis that "distinguishing between instructional leadership and other leadership facets is not very effective, primarily because it leads to fragmentation and segmentation" (p. 511).

2.3.3 Integrating instructional and transformational leadership

Instructional and transformational leadership have dominated theoretical discussion and research since the 1980s (Pietsch & Tulowitzki, 2017). In fact, they are the foremost conceptual models in the field of educational leadership, as measured by the number of empirical studies, which support the finding that both influence student learning to varying degrees (Day & Sammons, 2013; Hallinger, 2003). A meta-analysis (Robinson et al., 2008) of studies that investigated the differential effects of both leadership styles on student achievement found that the effect size of instructional leadership {r=.42} was nearly four times that of transformational leadership {r=.11}. A study (Shatzer, Caldarella, Hallam & Brown, 2014) that compared both leadership styles directly, reached a similar conclusion to the above research, that instructional leadership explained more of the variance in student achievement gains than transformational leadership. In contrast to the findings of these two studies, a mixed-methods study concluded that "neither instructional leadership strategies nor transformational leadership strategies alone were sufficient to promote improvement" (Day et al., 2016, p. 238). Pietsch & Tulowitzki (2017, p. 5) argue that overall, the evidence can still be considered inconclusive.

A review (Hallinger, 2003) of the theoretical and empirical development of instructional and transformational leadership models over 25 years revealed common characteristics such as: the principal creating a vision about learning, developing a learning culture, setting high expectations and goals for staff and students, and providing opportunities for staff professional learning. Marks & Printy (2003) conclude that individually they have their limitations, however, in combination they are essential to school improvement.

Marks and Printy (2003) referred to this integrated model as shared instructional leadership, which combines transformational practices to motivate staff to promote change, and instructional functions to improve teaching. In this model, the principal builds leadership capacity so others can collectively lead the instructional program. These scholars argued that school improvement requires leaders who are both transformational and instructional leaders because the former create the conditions that support teaching and learning, and the latter improve teaching practices that lead to higher student achievement. Their study of 24 schools in the US, investigating the relationship between leadership and quality teaching and learning, found that transformational leadership is a necessary but insufficient condition for school improvement because it lacked an explicit focus on curriculum and instruction. However, "when transformational leadership and shared instructional leadership co-exist in an integrated form of leadership, the influence on school performance, measured by the quality of its pedagogy and the achievement of its students, is substantial" (Marks & Printy, 2003, p. 370).

Printy et al., (2009) similarly found that when shared instructional leadership occurs in combination with transformational leadership, the impact on student learning is greater than individual forms of leadership. "Teaching quality and authentic student learning prosper when shared instructional leadership occurs in tandem with transformational leadership in an integrated or interdependent way" (Printy et al., 2009, p. 505). An empirical study (Hallinger, 2003) also found that effective principals use a combination of shared instructional and transformational leadership strategies in an integrated manner, to promote student achievement by creating the conditions that support improvements in teaching and learning.

Another study (Day et al., 2010) found that successful principals exercised different combinations of both transformational and instructional strategies at different times to improve student outcomes. They implemented these practices during different phases of their school's improvement journey, to progressively develop the school learning environment and teacher capacity. A three-year mixed methods study (Day et al., 2016) of 20 principals in effective and improving primary and secondary schools in England, found empirical evidence to support the premise that successful principals sustain improvement through a combination of transformational and instructional leadership strategies, based on the context and needs of the school. According to this study, successful principals implement a combination of "fit-for-purpose" (p. 225) instructional and transformational strategies over time to improve their schools, depending upon their context and according to the specific phase of the school's improvement journey.

A study (Day et al., 2011a) of over 600 of the most improved and effective primary and secondary schools in England found that a combination of instructional and transformational practices was used by successful principals, tailored to their own context. Leithwood and Sun (2012) reached a similar conclusion in their meta-analysis of 79 unpublished studies about school leadership and its impact on school conditions, teachers, and students. Additionally, Day and Sammons (2013) concluded that transformational and instructional leadership are not mutually exclusive. On the contrary, a combination of strategies can be used to enhance the conditions that improve teaching and learning.

2.3.4 Distributed leadership

Distributed leadership refers to collaborative leadership exercised by the principal, executive team, HODs, teacher leaders, and other members of the school improvement team (Hallinger, 2009; Menon, 2013). Authority and influence are exercised by members of the group depending on their expertise relevant to the assigned task (Leithwood & Duke, 1999). The leader's role is to design and maintain effective teams, and allocate appropriate tasks to each (Marzano et al., 2005).

The school leadership literature shows that there are multiple sources of leadership in schools (Harris, 2005). An international study (OECD, 2008) found that school leadership in the twenty first century tends to be increasingly distributed or shared, due to organisational diversity and complexity, particularly in secondary schools where the demands of leading a school are too great for any one leader. Nevertheless, the principal retains ultimate responsibility for operating the school, and in practice, remains the central and greatest source of leadership influence (Leithwood & Seashore Louis, 2012).

Distributed leadership emerged in the context of substantially increased demands placed on school leaders (Leithwood & Duke, 1998), and the subsequent realisation that they could not heroically undertake all leadership duties alone (Harris, 2004). It is based on the premise that the demands of leading and managing a school are too great for any one leader (Day & Sammons, 2013). It represents one of the most influential models in the field of educational leadership in the last 10 years due to the recognition that distributed leadership is required to mobilise all dimensions of a school to support teaching and learning (Harris, 2010; Heck and Hallinger, 2009). Therefore, distributed leadership is

claimed to have a stronger influence on student achievement than individual leadership (Leithwood & Seashore Louis, 2012).

A limited number of empirical studies have investigated the link between distributed leadership and student learning (Hallinger, 2009). A seminal study (Leithwood et al., 2004) in the US found that school leadership has a greater influence on the school and students when it is widely distributed. In the Australian context, a study (Dinham, 2005) of 38 secondary schools in NSW, discovered that in addition to the principal, the school executive and HODs played a significant role in leading teaching and learning.

Another study (Hallinger & Heck, 2010) found that distributed leadership was significantly related to change in academic capacity and subsequent growth in student learning.

Nevertheless, there is limited empirical evidence on the effects of distributed leadership on educational outcomes, and a need, therefore, to conduct more research in this area (Day & Sammons, 2013; Harris, 2005; Menon, 2013).

2.3.5 Leadership for learning

Criticism of the perceived limitations of extant leadership theories and models, essentially on the grounds that they did not capture the type of leadership that makes a significant difference to student achievement, led to an alternative, learning focused conceptualisation of leadership that emerged as the new paradigm for twenty first century school leadership (Bush, 2013; Hallinger, 2009). The term 'leadership for learning' was coined to describe a hybrid model of school leadership practices synthesised from a range of prototypes (Sun & Leithwood, 2015), and based on the finding that leadership is most successful when it is focused on teaching and learning (Leithwood & Riehl, 2003). It was referred to in the US as shared instructional leadership, in the UK as learning centred

leadership, and elsewhere as integrated leadership (Bush, 2013). Leadership for learning has a focus on learning, teaching, curriculum, and assessment, aligning all other dimensions of the school to improving student learning (Murphy, Elliott, Goldring & Porter, 2007). It recognises that effective principals work concurrently with a team of leaders at a range of instructional, transformational, and other tasks, in an integrated way, to improve learning (Marks & Printy, 2003).

Leadership for learning borrows from instructional leadership in its focus on improving instruction and student learning (Hallinger, 2011). It includes explicit dialogue about how to achieve this goal by creating and sustaining the school conditions that facilitate effective teaching and learning (Macbeath, 2006). Additionally, it recognises that leadership is context specific, and, therefore, influences the organisational variables that are directly linked to learning, to improve student outcomes (Hallinger & Heck, 2010a). It also incorporates the transformational leadership concept of securing teacher commitment to achieving the vision of improving student outcomes, through motivating staff and improving their work conditions (Leithwood & Jantzi, 2006). However, unlike instructional and transformational leadership, this model acknowledges that leadership is not limited to the principal, or indeed formal leadership positions (Marsh, Waniganayake & Gibson, 2014). It thereby integrates the concept of distributed leadership, involving a mutual influence process of principals and teachers contributing to curriculum, instruction, and assessment in an interdependent leadership relationship (Hallinger, 2009). It also involves the concept of accountability, in terms of attribution of responsibility for improving student achievement, to the team of leaders rather than the principal exclusively (Macbeath, 2006).

In the leadership and school improvement literature, leadership for learning is characterised by eight dimensions: articulating a vision for learning shared by the community; establishing an instructional program on enhancing teaching and learning; setting high standards and expectations; implementing and monitoring a coherent assessment program; creating a learning organisation; allocating resources to improve learning; forming an improvement focused culture; and promoting the success of all students (Murphy et al., 2007). The impact of leadership for learning on school improvement has been supported by some empirical evidence from quantitative and qualitative studies. A quantitative study (Marks & Printy, 2003) of 24 elementary, middle, and high schools in the US, revealed that leadership for learning has a substantial influence on school performance, measured by the quality of pedagogy and student achievement. A qualitative investigation (Printy et al., 2009) involving a case study of four schools in the same country, corroborated this finding.

2.3.6 Criticisms of the school leadership literature

In the past three decades, researchers have developed various models to explain the complex relationship between leadership and student achievement (ten Bruggencate et al., 2012). During that time, the pendulum has swung back and forth, favouring particular leadership models at different points in time (Hallinger, 2009). All the while, the conceptualisation of educational leadership has been continually evolving, from competencies to functions, and from individual to collective forms of leadership (Day et al., 2010). However, many of the models lack a conceptual framework (Leithwood, 2005), or significant body of empirical evidence to support them (Huber & Muijs, 2010). This has led some scholars to refer to some of these theoretical perspectives as rhetoric rather research

(Leithwood & Seashore Louis, 2012). Additionally, much of the educational leadership literature emphasises requisite values, beliefs, skills, knowledge, functions, and dimensions, rather than practices. The literature is inconclusive about the actual school leadership practices that lead to improved student outcomes (Harris, 2005). Further criticisms of the literature from the same author are that most of it is derived from sources in North America and Europe, and focuses on formal leadership roles such as that of the principal. Broadening the research base and leadership roles to other school leaders is recommended in future research (Harris, 2005).

The literature consistently emphasises the importance of leadership to school improvement. However, the most effective type of leadership to achieve improved student achievement is disputed. "The question of whether there is a best kind of educational leadership is still being debated and studied" (Pietsch & Tulowitzki, 2017, p. 5). The extent of the influence is also unresolved in terms of the available research base (Robinson, 2007). This research base consists in the main, of small-scale qualitative studies and large-scale quantitative studies. The pattern of evidence indicates that qualitative studies show larger effects sizes than quantitative ones in terms of leadership impact on student achievement (Day et al., 2010). The limitation of the former is that their findings cannot be generalised to other contexts (Leithwood & Seashore Louis, 2012). The latter is limited in terms of knowledge of the specific practices that leaders implement to improve student outcomes (Harris, 2005). Deficiencies in research methods have also been acknowledged by some scholars who recommend gathering evidence from multiple perspectives, more mixed methods research designs, and more longitudinal studies (Thoonen et al., 2012).

2.3.7 Leadership and school improvement: The empirical evidence

SER consistently emphasised the importance of leadership to school effectiveness (Harris, 2005). Similarly, SIR supports the view that leadership is integral to achieving and sustaining improvement (Hallinger & Heck, 2009). Leithwood et al. (2004) argue that "there is not a single documented case of a school successfully turning around its pupil achievement trajectory in the absence of talented leadership" (p.14). Empirical studies have shown that leadership has a small but statistically significant indirect effect on student achievement, mediated through school conditions and culture (Hallinger & Heck, 1998). Indeed, leadership has been found to be second only to quality instruction among school related factors in its impact on student achievement (Leithwood et al., 2004).

A major leadership study (Seashore Louis et al., 2010) in the US, involving qualitative case studies and large-scale quantitative analysis, reported an empirical link between school leadership and improved student outcomes. This study found that leadership has a direct influence on teachers and school conditions such as culture, resources, and instructional programs, which in turn influence student achievement. It also found that distributed leadership, combined with collaboration by teachers in PLCs, led to higher student achievement. Leithwood and Riehl (2003) reported that leadership explains approximately only three to five percent of the variation in student learning across schools. However, this amounts to nearly one quarter of the total effects of all school factors.

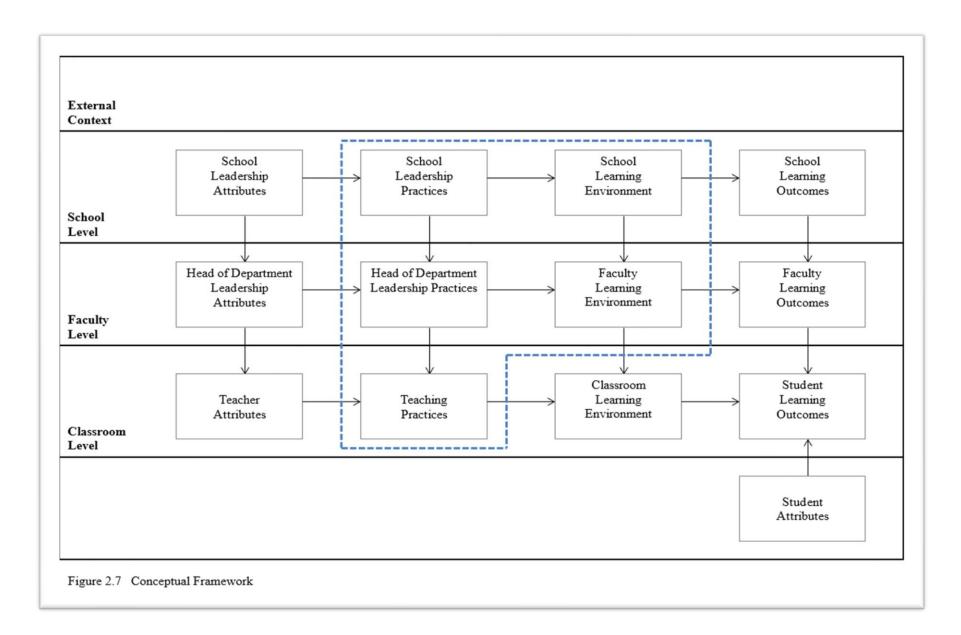
Some studies have found leadership influence to occur through four predominant areas: articulating a clear academic vision and mission, maintaining a steadfast instructional focus, building the academic culture of the school, and developing people in the organisation (Leithwood & Riehl, 2003; Hallinger, 2011). Other studies have found that

effective school leaders improve teaching and learning indirectly and most powerfully through their influence on staff motivation, commitment, and working conditions (Day et al., 2009; Leithwood, et al., 2004; Leithwood and Seashore Louis, 2012).

Despite a large body of research on school leadership, the empirical evidence about the specific leadership practices that contribute to the development of the school learning environment and effective teaching is limited (Harris, 2005; Leithwood, et al., 2010; Leithwood & Sun, 2012; Marzano, et al., 2005). Nevertheless, international principal-effects research has highlighted that school leadership matters (Bush & Glover, 2014). However, the extent to which it matters continues to be debated in the literature (Harris, 2005). The lack of a consensus in this regard suggests further research is required to investigate the specific leadership practices that make the biggest difference to improving the school learning environment and teaching (Leithwood & Sun, 2012; ten Bruggencate et al., 2012). Research of this type is limited in the Australian context, particularly in secondary schools.

2.4 Conceptual framework

To reiterate, the purpose of this thesis was to investigate the specific leadership practices that contribute to development of the school learning environment and effective teaching, in order to develop a theory-driven and evidence-based approach to school improvement, and contribute to theoretical robustness in the field (Creemers & Kyriakides, 2012). A conceptual framework was developed as a roadmap for this thesis and is shown in Figure 2.7. It was derived from the DMEE (Creemers & Kyriakides, 2008) and designed to investigate these differential leadership practices through implementing policies, actions, and evaluative mechanisms.



The conceptual framework illustrated in Figure 2.7, contains an integrated, multi-level structure, the accepted methodological approach to investigating school effectiveness and school improvement (Goldstein, 2003), because SER over the last four decades has shown that factors contributing to student achievement gains are located at multiple levels (Townsend, 2007). The framework depicts the context at the highest level, next the school, then the faculty, and finally the classroom, which includes the teacher and students. It assumes that complex interaction occurs between factors at various levels. It also assumes that the higher levels influence lower levels, either positively or negatively. Drawing on contingency theory, the framework further assumes that factors at the broader contextual level, have direct and indirect effects on the policies and actions implemented by school leaders to improve the functioning of factors at the school level to enhance student outcomes, emphasising that schools do not operate in a vacuum. These factors are mediated by the school context, inhibiting or enhancing the practices of school leaders.

In the current national agenda, contextual factors include, but are not limited to, a standardised curriculum, rigorous testing regime, funding arrangements, transparency, and accountability to the educational community, including the Federal Government. Contextual factors at a state level include school registration requirements and teacher accreditation standards. Further demands impacting upon school leaders, in the form of improvement targets for example, are imposed by their own governing bodies such as a system or board. Leadership is also contextualised within a local setting consisting of location, socio-economic area, student composition, school size, and parent expectations. The broader educational context also comprises evaluation of policies and actions implemented to improve the school learning environment and teaching.

The school level, in particular the school learning environment and its impact on the quality of teaching, is the focus of this thesis, because it is the most important predictor of school effectiveness and improvement, due to its direct and indirect impact on student achievement (Kyriakides et al., 2010). The school learning environment is expected to influence the behaviour of teachers and the effectiveness of their practice (Kyriakides & Creemers, 2012). Additionally, research shows that schools with a positive learning environment produce higher student achievement (Hattie, 2009).

Leadership is the most crucial factor at school level and is assumed to be leadership for learning, integrating transformational, instructional, and distributed dimensions. At this level, the framework assumes that leadership practices focus primarily on implementing policies and actions to develop a learning environment that facilitates effective teaching. This represents the primary responsibility of school leadership, to improve student academic achievement. The success of this endeavour, or lack thereof, has a direct relationship to school outcomes, the most important measure of school improvement.

An additional level, the faculty, not contained in the DMEE, has been added to this conceptual framework, to facilitate an examination of the contribution of middle leaders to the learning environment. Whilst the principal remains the central source of leadership influence, leadership for learning, particularly in secondary schools, tends to be exercised predominantly at faculty level due to the increasing administrative demands placed upon the principal (Bendikson, 2011). As will be explained comprehensively in the findings chapters, semi-structured interviews with HODs, as well as analysis of department goals and curriculum documentation, provided valuable

data in relation to leadership practices deployed at faculty level to improve teaching and learning, thereby establishing alignment to school improvement priorities.

The classroom, including the two main variables, the teacher and student, is represented in the fourth level of this framework. Research has shown this level to contribute most to student achievement (Kyriakides et al., 2013; Scheerens, 2013). The classroom level, whilst not the focus of this study, is important in terms of the relationship between the school level and the impact it has on classroom teaching, mediated by leadership practices at the faculty level.

The final layer of the conceptual framework includes the attributes of school leaders, teachers, and students. An important aspect of leadership at school and faculty level is the attributes of leaders. This conceptual framework assumes that these attributes, such as experience, expectations, and values, influence leadership practices at both levels. Whilst leadership attributes are included in the framework, they do not form part of the investigation of this thesis.

Student attributes integrated into this framework comprise intake factors such as socio-economic status, ethnicity, and attitude to learning. Whilst this construct has been included in the framework, it too was not part of the focus of this inquiry. Other constructs: school, faculty, and student outcomes, complete the model. However, they were not investigated either. The parameters of this thesis consist of leadership practices, the school and faculty learning environment, and teaching practices.

2.5 Summary

The literature informing this thesis emphasises that the school learning environment and quality of instruction, can be directly influenced by school leaders to facilitate improved student outcomes (Lezotte & Snyder, 2011). However, the literature

is unclear about the relationship between these variables: school leaders representing the independent variable, student outcomes the dependent variable, and the school learning environment and effective instruction the intervening variables. This thesis seeks to explain the specific relationship between these variables at the school level. A robust research design was critical to investigating the interaction of these variables and explaining their interaction in enhancing the school conditions that support learning and teaching, as well as closely analysing the theoretical assumptions underpinning this inquiry.

The next chapter will describe in detail the research design implemented to investigate this relationship. It also provides a rationale for the qualitative approach and methods selected to achieve the overall research aims.

Chapter 3 - Research design and approach

3.0 Introduction

This chapter describes the research design developed to achieve the research aims of this thesis and provides a rationale for its selection. It presents extensive details of the systematic process of data collection and analysis crucial to methodological rigour (Santiago-Delefosse, Gavin, Bruchez, Roux & Stephen, 2016). The chapter is structured into 14 sections. After the introduction, the research design and its rationale are explained. Next, the research context, including participant population and sample selection, is outlined. Following that, the methods of data collection and analysis are examined in detail. This is proceeded by a discussion of validity and reliability issues. Ethical considerations are then explored, followed by an examination of researcher reflexivity. Then, the strengths and limitations of the methodology are considered. Finally, the key challenges encountered in undertaking the fieldwork are discussed.

3.1 Research design

This thesis employs an exclusively qualitative inquiry to achieve its research objectives, including close analysis of its main underlying theoretical assumption. It comprises a multi-site case study involving four non-government secondary schools in NSW. The research methods used for each of the case studies include semi-structured interviews with 10 participants, consisting of one-on-one conversations with the Principal, four HODs, and five teachers. Methods also included observation of teachers and students in their daily on-site activities, document analysis of school and faculty level strategic plans, and examination of curriculum documents.

3.2 Rationale for the research design

The case study was selected as the preferred methodology for this study for three reasons: its established rigour in investigating contemporary social phenomenon in depth (Yin, 2012); capacity to investigate participants' lived experience in their own [school] context (Miles & Huberman, 1994); and the rich data it yields that quantitative methods alone cannot produce, which is suited to confirming or building theory (Hallinger & Heck, 2011b).

First, the case study was adopted for this thesis because it has featured quite prominently in school improvement research which has had a predominantly qualitative orientation (Chapman et al, 2016). "Qualitative analysis is fundamentally case-oriented. Data are contributed by, and analysis is centred around cases" (Bazeley, 2013, p. 3). The case study has been used to good effect in seminal studies (Kyriakides & Creemers, 2008; Creemers and Kyriakides, 2009; Kyriakides, Creemers & Antoniou, 2009; Creemers & Kyriakides, 2010a) in this tradition, particularly those testing the validity of the DMEE (Creemers and Kyriakides, 2008), which shaped the conceptual framework guiding this thesis. Both the robust nature and the suitability of the case study method became abundantly clear during the fieldwork phase due to the thoroughness of the responses to the research questions, as well as the opportunity to compare cases which was a significant factor in the analysis of data, presentation of findings in Chapters 4-7, and cross-case comparison in Chapter 8.

The second reason for selecting the case study is attributable to its status as the established method for collecting empirical evidence, due to its capacity to manage a variety of data which provides in-depth understanding of a social phenomenon in a particular setting (Miles & Huberman, 1994). The subject under investigation in this

thesis is the leadership practices and processes that develop the school learning environment and facilitate effective teaching. Quantitative instruments such as surveys are not the most effective method for studying social phenomenon in their dynamic natural surroundings to gain insights into micro-level social processes (Swanborn, 2012). "A case study provides a unique example of real people in real situations ... [which] can penetrate situations in ways that are not always susceptible to numerical analysis" (Cohen, Manion & Morrison, 2011, p. 289). This penetration is facilitated by the close proximity of the researcher to the data (Johnson & Christensen, 2008), evident during the fieldwork when I was able to observe closely the nuanced social interactions of participants.

Another advantage of the case study is its capacity to focus on context to better understand the phenomenon under investigation (Patton, 2015). "They are a source of well-grounded, thick descriptions and explanations of processes in local contexts" (Yin, 2014, p. 1). Case studies, as confirmed during the fieldwork phase of this thesis, are context sensitive and naturalistic. They provided a deeper understanding of how context informs the school improvement strategies of leaders. Studying subjects in their own environments also provided deep understanding of leadership practices, social processes, and culture. "Doing a case study presents a unique opportunity to focus on social interactions and the meanings that participants in the system attach to each other, and how they interpret each other's acts" (Swanborn, 2012, p. 16). Additionally, case studies captured the complexity of relationships in a natural setting, different perspectives, and rival explanations (Cohen et al., 2011), which provided greater subtlety to the data.

The third reason the case study method was adopted, is its capacity to yield detailed data from multiple sources (Yin, 2018). This idea is re-iterated by qualitative researchers. "The case study stands on its own as a detailed and rich story about a person, organisation, event, campaign, or program – whatever the focus of the study" (Patton, 2015. P. 259). During the data collection and analysis for this investigation, the case study approach facilitated a deeper understanding of leadership practices in a particular context from the perspective of diverse participants. The data yielded detailed explanations about decisions made by leaders, why the decisions were made, how they were implemented, and their consequences.

Additionally, the semi-structured interviews were a rich source of data. They enabled me to focus in depth on answering the research questions from the point of view of the participants (Swanborn, 2012). They also allowed participants to candidly express their views and experiences while maintaining a level of question consistency (Turner, 2010). Semi-structured interviews also produced divergent views and interpretations of the same events (Swanborn, 2012), which contributed to a richer narrative within each case study. Whilst analysis of key documents such as strategic plans revealed theoretical or aspirational school improvement goals, curriculum material and personal observation of teachers and students in their daily on-site activities, provided empirical evidence of the contribution of leadership practices to enhancement of the school learning environment and effective teaching.

3.3 Research context, participant population and sample selection

3.3.1 Research context

This section contains information relating to the historical background, geographic location and institutional characteristics of each case study as recommended

in the literature (Baskarada, 2014). The fieldwork was conducted over 24 months, during 2017-2018. The four schools are located in different geographic areas in greater metropolitan Sydney: the South West, Northern Suburbs, Greater West, and Eastern Suburbs, allowing for an additional layer of demographic comparison between these institutions. All four Principals, served as Deputy in their current school. Two of the four, from Case Study 2 and 4, also occupied the position of Deputy in another school.

The sources of information for the comparative analysis of these institutions, were data collected from face-to-face interviews, observations of people and processes within the institution, document analysis, each School's Annual Report available on its public website, as well as information available on the ACARA MySchool website (https://myschool.edu.au/). Case Study One, is a medium size, co-educational institution which draws its students from a more multi-cultural and lower socioeconomic area in South West Sydney as reflected in its Index of Community Socio-Educational Advantage [ICSEA]. Case Study Two, is a large, single sex girls college which caters for upper middle-class families on Sydney's leafy North Shore. Operating for over a century, it has been a historically high performing school, one of the most outstanding non-selective schools in NSW since the introduction of the Higher School Certificate [HSC], according to league tables published in the Sydney Morning Herald Newspaper. Case Study Three and Four were established 24 years apart in the early to midtwentieth century, based on community demand for secondary education due to a burgeoning number of families with school aged children migrating to that locality. Both are co-educational environments and faith-based, although, they represent different denominations. Case Study 3 is a medium size institution, similar in enrolment numbers

to Case Study One. The fourth and final Case Study is a large, single sex college in the Eastern Suburbs with a student population of 1,000 boys.

As illustrated in Table 3.1 the case studies consist of two co-educational colleges of medium size, and two large single sex schools, one of each gender. The oldest institution was established in 1885 and the most recent in 1990. Two of the sites had zero indigenous enrolments, and the others had 1% each. The highest performing school according to HSC results, has the highest percentage (37%) of students whose first language is not English. All institutions record high student attendance, ranging from 90-95%. The two schools with the highest ICSEA, located in the most affluent areas of Sydney, charge the highest tuition fees. These institutions also record the lowest teaching and non-teaching staff to student ratio. They have the financial capacity to employ more staff as a result of their fees structure. Their students also perform higher in the HSC according to the measure of the mean Australian Tertiary Admission Rank [ATAR].

 Table 3.1 Case Study Background Characteristics

Characteristics	Case Study 1	Case Study 2	Case Study 3	Case Study 4
Year of establishment	1990	1885	1918	1942
Classification	Co-Educational 7-12	Single sex 7-12	Co-Educational 7-12	Single sex 7-12
Gender	Girls (290) / Boys (320)	Girls	Girls (268) / Boys (295)	Boys
Total student enrolments	610	950	563	1000
Indigenous students	1%	1%	0%	0%
Language background other than English (LBOTE)	17%	37%	9%	10%
Student attendance rate 2016	95%	95%	90%	95%
Fees per annum	10k	30k	20k	30k
Number of teaching staff	47 FTE	95 FTE	45 FTE	100 FTE
Number of non-teaching staff	18 FTE	40 FTE	15 FTE	45 FTE
School ICSEA Value	1072	1222	1132	1153
HSC results - median ATAR (State average 68%)	78	94	80	90

3.3.2 Participant population

A written demographic survey was administered to each of the 40 participants. On a site visit prior to the interviews, a survey for each participant was given to the Principal, with instructions for its completion in readiness for interviews. At the start of each interview, survey responses were confirmed, and collated later. Only general demographic data about participants is reported to represent a snapshot of each rather than a full profile. The demographic data for each Case Study is presented in Tables 3.2 – 3.5 following. For ease of comparison, the salient data is organised in Table 3.6 below.

As an investigation into leadership practices, it was essential to interview the Principal in each institution to gain insights into the strategic practices they and their leadership team implemented to develop the school learning environment in order to facilitate effective teaching. They provided valuable data about how their school improvement decisions were informed by local context. It was also critical to include HODs in the participant pool for two reasons. First, the conceptual framework guiding this study is a multi-level model aimed at investigating middle leadership in addition to the Principal and School Leadership Team [SLT]. These middle leaders provided responses which emphasised the role of HODs and their Assistants in developing the learning environment at a faculty level. Second, they were also able to offer their perceptions of how a faculty plan is aligned to the greater school strategic improvement blueprint. Teachers were included in the inquiry because they represent the output under investigation, teacher effectiveness resulting from leadership practices at a whole school and faculty level. Teachers provided invaluable data about the success or shortcomings of leadership practices designed to improve the school learning environment to enhance the quality of teaching.

 Table 3.2
 Demographic Data – Case Study 1

Participants	Age	Gender	Highest educational qualification	Teaching discipline	Teaching years	No of schools taught in	Sectors taught in	Roles in schools	Years in current role
Principal	41-50	F	Masters	HSIE	27	3	State/Govt Independent /Faith based	Teacher Welfare Coordinator Head of Curriculum Deputy Principal	4
HOD 1	31-40	M	Bachelors	English	14	3	State/Govt Independent /Faith based	Teacher Careers Advisor Welfare Coordinator	7
HOD 2	31-40	M	Bachelors	PDHPE	17	5	State/Govt (UK) Independent /Faith based	Teacher Sport Coordinator	6
HOD 3	41-50	M	Masters	Languages	24	1	Independent /Faith based	Teacher	17
HOD 4	51-60	M	Bachelors	Science	15	1	Independent /Faith based	Teacher	8
Teacher 1	21-30	F	Bachelors	PDHPE	4	2	State/Govt Independent /Faith based	Teacher	3
Teacher 2	21-30	M	Bachelors	Music	5	5	Catholic/ Systemic Independent /Faith based	Teacher	3
Teacher 3	21-30	F	Bachelors	Geography, Commerce & Business Studies	5	3	State/Govt Independent /Faith based	Teacher Welfare Coordinator	3
Teacher 4	21-30	M	Masters	History & Languages	3	3	State/Govt Independent /Faith based	Teacher	2
Teacher 5	21-30	F	Bachelors	English & Drama	7	2	Independent /Faith based	Teacher	5

 Table 3.3
 Demographic Data - Case Study 2

Participants	Age	Gender	Highest educational qualification	Teaching discipline	Teaching years	No of schools taught in	Sectors taught in	Roles in schools	Years in current role
Principal	51-60	F	Masters	English, History & Languages	30+	4	Independent /Faith based & Non-denom	Teacher Welfare Coordinator Head of Curriculum Deputy Principal	3
HOD 1	51-60	F	Bachelors	Maths	30+	8	State/Govt Independent /Faith based & Non-denom	Teacher Head of Curriculum (previous school)	3
HOD 2	51-60	F	Bachelors	History	30+	4	Catholic/ Independent /Faith based	Teacher	16
HOD 3	51-60	F	Masters	Music	30+	7	State/Govt Systemic & Independent /Faith based	Teacher	22
HOD 4	51-60	F	Masters	English	30+	5	Independent /Faith based	Teacher Welfare Coordinator	8
Teacher 1	31-40	F	Masters	PDHPE & Maths	17	6	Independent /Faith based	Teacher Welfare Coordinator	9
Teacher 2	41-50	F	Bachelors	Maths	15	4	State/Govt Independent /Faith based	Teacher Boarding Coordinator	3
Teacher 3	41-50	F	Masters	Languages	28	6	State/Govt Independent /Faith based	Teacher Welfare Coordinator	16
Teacher 4	60+	M	Masters	English	30+	4	Catholic/ Independent /Faith based	Teacher HoD (previous school)	8
Teacher 5	31-40	F	Bachelors	Studies of Religion	6	3	State/Govt Independent /Faith based	Teacher	5

 Table 3.4
 Demographic Data – Case Study 3

Participants	Age	Gender	Highest educational qualification	Teaching discipline	Teachin g years	No of schools taught in	Sectors taught in	Roles in schools	Years in current role
Principal	61+	F	Bachelors	Performing Arts / Drama	30	1	Independent /Faith based	Teacher Head of Department Deputy Head	6
HOD 1	61+	F	Doctorate	Languages	40	8	State/Govt Independent /Faith based	Teacher Head of Department	10
HOD 2	51-60	M	Doctorate	Performing Arts / Music	25	2	Independent /Faith based	Teacher Head of Department	9
HOD 3	51-60	F	Masters	English	27	5	State/Govt Independent /Faith based	Teacher Welfare Coordinator Head of Department	9
HOD 4	51-60	F	Bachelors	Social Sciences	17	3	Independent /Faith based	Teacher Head of Department	3
Teacher 1	51-60	M	Bachelors	Creative Arts / Visual Art	33	2	Independent /Faith based	Teacher Welfare Coordinator	17
Teacher 2	31-40	F	Masters	PDHPE	12	4	State/Govt /UK/ Independent /Faith based	Teacher Sport Coordinator	8
Teacher 3	51-60	F	Bachelors	Science	15	3	State/Govt Independent /Faith based	Teacher Welfare Coordinator	3
Teacher 4	41-50	M	Bachelors	English & History	10	2	State/Govt Independent /Faith based	Teacher Welfare Coordinator	9
Teacher 5	61+	F	Bachelors	Mathematics	45	5	State/Govt Independent /Faith based	Teacher Careers Advisor	17

 Table 3.5
 Demographic Data – Case Study 4

Participants	Age	Gender	Highest educational qualification	Teaching discipline	Teaching years	No of schools taught in	Sectors taught in	Roles in schools	Years in current role
Principal	51-60	M	Masters	History & Studies of Religion	23	3	Independent /Faith based	Teacher Head of Department Deputy Head	6
HOD 1	61+	F	Masters	Creative Arts / Visual Art	40	6	State/Govt Independent /Faith based	Teacher Head of Department	24
HOD 2	41-50	F	Masters	Religious Studies & History	25	1	Independent /Faith based	Teacher Head of Department	10
HOD 3	31-40	M	Bachelors	Performing Arts / Drama	15	3	Independent /Faith based	Teacher Head of Department	3
HOD 4	61+	M	Masters	Science	40	6	Independent /Faith based	Teacher Welfare Coordinator Head of Department	20
Teacher 1	21-30	F	Bachelors	English	6	2	Independent /Faith based	Teacher	3
Teacher 2	31-40	F	Bachelors	PDHPE	9	2	Independent /Faith based	Teacher	6
Teacher 3	61+	F	Bachelors	History	40	5	State/Govt Independent /Faith based	Teacher Welfare Coordinator	10
Teacher 4	61+	M	Bachelors	Social Sciences	33	4	State/Govt Independent /Faith based	Teacher Welfare Coordinator	11
Teacher 5	41-50	M	Bachelors	Technology	20	2	State/Govt Independent /Faith based	Teacher Administration Coordinator	12

 Table 3.6
 Demographic Data – Case Study Comparison

Characteristics	School 1	School 2	School 3	School 4
Qualifications - Undergraduate/Post-graduate	7/3	4/6	6/4	4/6
Age – average	34	49.5	52.5	42
Years of teaching - average	12	24	25.4	25.1
New Scheme Teachers	2	0	0	1
Number of schools taught in - average	2.8	5.1	3.5	3.4
Years in current school - average	5.8	9.3	9.1	10.5
Teaching experience in different sectors – average	1.7	2	2.1	1.4
Teaching experience - interstate	1	0	0	1
Teaching experience – overseas	0	1	1	2
Gender - female/male	4/6	10/0	5/5	7/3

The following observations can be made from the data in Table 3.6 provided by the primary sources of data – principals, HODs, and teachers. 60% of participants in Case Study Two and Four hold post-graduate qualifications, as opposed to fewer than 50% of their counterparts in One and Three. The average age of participants overall is 44.5 years. The average years of teaching experience is greater than 24 years in Case Study 2 to 4. Notably, in Case Study One, the average age of teachers is 34 years, and their teaching experience is 12 years on average. This institution also had the highest number of New Scheme Teachers [NSTs], two, compared to only one other, in Case Study Four. The average tenure across the schools is 8.7 years. Overall, the experience of participants in different sectors, including teaching interstate and overseas, is limited. 65% of participants are female. Three of the four principal participants are female.

3.3.3 Sample selection

Following receipt in February 2017 of the University of New South Wales [UNSW] ethics approval from Human Research Ethics Approval [HREA] Panel B, a non-probability sampling strategy based on specific criteria (Cohen et al., 2011) was used to identify non-government secondary colleges in the AIS. To elaborate, from the available pool, I selected particular sites and participants who could respond knowledgeably to the research questions (Swanborn, 2012). Some selection bias is inherent here as a result of this approach. Ultimately, four case studies were strategically selected due to their information richness and capacity to offer interesting insights into the phenomenon under investigation (Patton, 2015). A greater number of cases would not necessarily have added any new data.

The four principals who agreed to be involved in the study were invited to participate based on their track record of effectively leading internal school reform in

their respective context. As the Head of a secondary school in the independent sector, I was aware through networking that the principals of these schools were successful change agents in their own contexts. The principals of Case Study One and Four had effectively implemented curriculum-based initiatives such as an Assessment for Learning Framework in the former, and the International Baccalaureate, in the latter. Their counterparts in the other cases had introduced student well-being programs in response to managing mental health conditions, which were effective in delivering noncognitive outcomes such as building resilience. I selected these cases with the expectation that they would shed light on the research questions guiding this thesis because the innovations implemented at these sites had sufficient time to distil and produce the stated outcomes.

Additionally, the institutions facilitated comparison focused sampling (Patton, 2015) based on the following dimensions: different points in their improvement journey; as well as diverse geographic location, socio-economic characteristics, academic performance, gender (single sex and co-educational), and type (faith-based). Finally, they presented an element of convenience sampling with regard to their accessibility within the Sydney metropolitan area.

An invitation [Appendix 1] to participate in the research was forwarded to Heads of School via email correspondence. Upon gaining agreement, from 50% of invitees, the Principal of the school was asked to invite HODS and teachers to participate. From this pool, I selected participants randomly, yet purposively on the basis that they have been employed at their respective schools for 3-5 years, so that they were able to comment on the practices of the current leadership team and their efficacy. More importantly,

their selection met the criteria that they could provide the most useful information in response to the research questions (Creswell, 2013).

Once the collective invitation to participate in the research study was accepted by the Principal and nominated participants, all were individually emailed a formal written invitation to participate [Appendix 2], including details of what partaking in the study would involve. Following email communication, a contact visit was arranged one month prior to conducting the interviews as suggested in the literature (Seidman, 1998). The visit assisted with explaining to participants the objectives of this thesis, thereby initiating the process of gaining informed consent. The other benefits of the visit were establishing trust with participants through spontaneous dialogue, as well as coordinating logistical matters such as interview schedules during school hours, at a convenient time for the participants, when they were not required to attend to their regular duties such as teaching, supervising students, or meeting with colleagues.

The UNSW Participation Information Statement and Consent [PISC] form

[Appendix 3] was forwarded to participants three weeks prior to interviews, in order to gain written consent. Once consent was granted, a demographic questionnaire

[Appendix 4] and copy of the interview questions [Appendix 5] were forwarded to participants a fortnight prior to the fieldwork. On the agreed upon dates, PISC forms were collected immediately prior to scheduled interviews and responses confirmed with participants. Interviews were conducted in suitable venues such as the Principal's office or interview rooms, where privacy and confidentiality were maintained.

3.4 Data collection methods

This section describes the data collection methods and processes involved in this thesis. It also briefly outlines some of the challenges encountered during data collection.

Table 3.7 shows the number and breakdown of the research participants, as well as the methods used to gather data.

Table 3.7 Participant data and research instruments

Case Study	Participants	Research Methods
1-4	Principals - 4 HODs - 16	Demographic survey
		45-minute semi-structured interviews
	Teachers – 20	Observation of staff and student events
		Observation of staff and student events
		Document study – strategic plans & curriculum

The data collected came predominantly from the following methods: 45-minute semi-structured interviews with each of the 40 participants; a demographic survey completed by each participant prior to the interview; observation of staff development days, staff meetings, school assemblies, and classrooms via walk-throughs; analysis of documents such as the school strategic plan and faculty goals; curriculum documents such as programs and assessment tasks; and my field notes recorded in a journal.

Demographic surveys were useful in terms of creating a profile of participants individually and collectively at each site, to provide a more holistic picture of the entire study population. They also facilitated a comparative analysis between cases.

The interviews provided the greatest volume of data in direct response to the research questions, thereby providing the highest value. 10 interviews at each site were judged to be sufficient to gain the requisite data for each research question. A data saturation point was reached with this number of interviews, with no/negligible new information anticipated from additional participants. 45 minutes was adequate time to explore in depth the research questions, with most participants. The four principals interviewed were the exception to this timeframe.

Observations were undertaken between interviews and yielded valuable insights into the context and culture of each site. An observation protocol [Appendix 6] was developed to record observations. I took notes during the observation and analysed the data from them at a later point. They provided valuable empirical evidence of the theoretical concepts participants discussed during interviews in relation to the research aims of this thesis.

Documents could not be taken off-site so the analysis of them also took place intermittently between interviews. School strategic plans provided data about the institutional improvement goals of the Principal. Faculty plans produced additional data about the leadership practices of HODs as well as the process of aligning a department to the overall strategic goals of the school. Finally, a research journal was used throughout the fieldwork, on and off-site, to record details and ideas as they came to mind. This 'trick of the trade', as recommended in the literature (Bazeley, 2013; Creswell, 2013), was beneficial with regard to capturing the minutiae of the data collection process. In combination, the above data collection methods produced a substantial volume of data, which not only covered the research questions, but did so to such an extent that negotiating this mass of information provided its own challenges, which will be discussed presently.

The main data collection method involved one-on-one, semi-structured interviews which were determined to be the most appropriate method of data collection for several reasons. They are the most commonly used approach in qualitative research because they are a systematic and rigorous method of data collection (Minichiello, Aroni & Hays, 2008), involving co-authoring of data (Miles, Huberman & Saldana, 2013). "At the root of the in-depth interview is an interest in

understanding the experience of other people and the meaning they make of that experience" (Seidman, 2013, p. 3). Once rapport and trust were established (Walter, 2013), participants provided candid and in-depth data about their thoughts, beliefs, knowledge, and experiences in response to the research questions (Johnson & Christensen, 2008). An additional justification for interviews is that the multiple perspectives from information rich participants, particularly expert interviews with principals and HODs, also produced nuanced data (Krueger & Casey, 2000), that was triangulated at a later date (Denzin & Lincoln, 2011), and discussed in due course.

An interview protocol [Appendix 7] to guide interaction with participants, as recommended by researchers (Kvale, 1996), was employed. The research questions which emerged from the conceptual framework were disaggregated into smaller units which sharpened the focus of this thesis. The model adopted was five to seven questions in accessible, user-friendly language (Patton, 2015). The interview questions were mostly worded in an open-ended format to elicit rich data. They were pilot tested prior to interviews, in an effort to refine the wording and ensure as far as possible, that they could elicit the information required to answer the research questions (Bryman, 2012). Pilot testing occurred with one participant from each of the following categories: former secondary school principal, current principal, HOD, and teacher. Once the protocol was finalised, interview practice was undertaken with the above-mentioned pilot group, to refine my interview technique, as recommended in the literature (Walter, 2013). In particular, the following techniques were the focus of the practice sessions: listening actively to participants whilst controlling the instinct to talk or interrupt; asking clarifying questions; asking open-ended questions; and keeping participants focused on the questions through steering (Seidman, 1998). The protocol ensured the same basic

lines of inquiry were followed with each participant, allowing some flexibility to accommodate respondent roles (Patton, 2015).

The interview format selected, consisted of three sections: a briefing, the interview proper, and a de-briefing (Kvale, 1996). Adhering to this model, the briefing commenced, after personal introductions, with an explanation of the purpose of this thesis, the time required for the interview, and procedures to ensure confidentiality and privacy. Next, written consent was obtained from the participants via the PISC form. Then, confirmation of demographic data was undertaken. Permission to audio record interviews was sought and granted. Finally, just prior to the commencement of questioning in part two of the interview, participants were offered a copy of a summary report of the interview.

The second section, the interview proper, consisted of a pre-arranged set of questions asked of each respondent to minimise interviewer bias. The systematic interview protocol also facilitated easier data organisation and analysis (Patton, 2015). Descriptive questioning was employed in the opening to facilitate the participant talking about the topic in general terms. In the middle stage of the interviews a funnelling approach, progressing through questions from general to specific, was used (Minichiello et al., 2008). Questions were asked respectfully whilst I listened intently and empathetically. Participants were encouraged to explain, clarify, or expand on a response through follow-up questions or using prompts (Kvale, 1996). Critical information was recorded manually as a back-up, as recommended by qualitative researchers (Minichiello, et al., 2008).

The third section of the interview, the de-briefing, comprised a 'clearing-house' question, re-iteration of confidentiality and privacy, another offer of a summary report,

and finally, thanking each participant for their important insights and contribution to this thesis (Kvale, 2007). In the post-interview stage, a research journal was used to record and evaluate the contribution of each interview (Bazeley, 2013). Member checking (Creswell, 2013) was also used via email following each site visit.

Following granting of consent by participants, interviews were digitally recorded using the *iRecorder* app downloaded from the app store to my iPad. The recording device and method of transcription were organised prior to the interviews (Creswell, 2013). I transcribed the interviews verbatim, rather than outsourcing transcription, to maintain accuracy of data collection and prevent data loss and distortion (Cohen et al., 2011). This deep immersion in the data provided familiarity with interview content, facilitating smoother transition to the data preparation and analysis which followed. The data was stored on my personal computer and backed up to two cloud-based repositories, *Dropbox* and *OneDrive*, as well as an external hard drive – all username and password protected to maintain data security.

3.5 Data analysis

This section explains in detail the six-stage process of data analysis recommended by qualitative researchers (Creswell, 2014; Creswell & Creswell, 2018; Patton, 2015). This includes organising the data for analysis, as well as the re-iterative cycle of analysis, drawing conclusions, returning to the data for further analysis, and refining deductions (Bazeley, 2013). The theoretical approach to data analysis (Miles & Huberman, 1984) and the chain of evidence maintained throughout the process, are described (Yin, 2014).

Figure 3.1 below. shows the six-stage data analysis process (Creswell, 2014; Creswell & Creswell, 2018; Patton, 2015) adopted for this thesis.

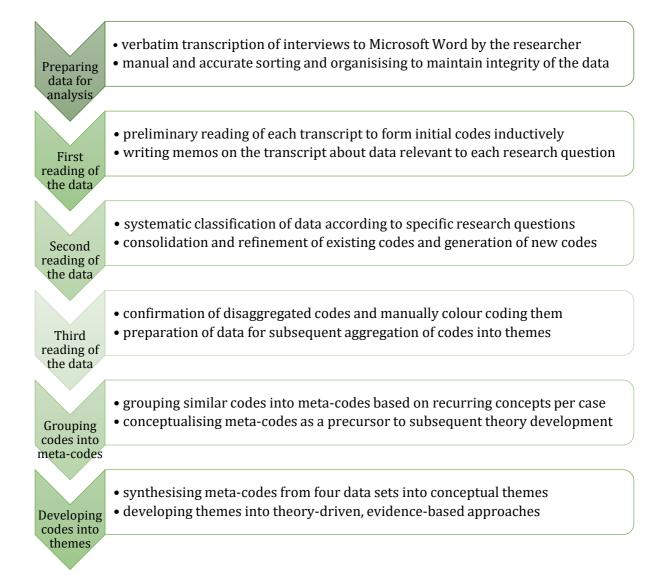


Figure 3.1 Six-stage data analysis schema employed in this thesis

In the first stage, the raw data were organised and prepared for analysis. This involved verbatim transcription of the interviews from the *iRecorder* app to a Microsoft Word document, manually and accurately, to maintain the integrity of the data (Creswell, 2016). Rather than using a qualitative data analysis software package such as NVivo, I preferred to trawl through the data to sort and analyse it, thereby engaging with the data throughout all steps of the analytical process. It is satisfying to note that no data was lost or otherwise compromised during the process.

The second stage of data analysis involved a preliminary exploratory reading of each transcript to get a sense of the whole interview and formulate initial codes on the basis of information that emerged from the data (Norton, 2009). An open coding approach of letting the data tell the story was adopted (Patton, 2015). Therefore, no a priori labels were created or assigned throughout the process of data analysis (Johnson & Christensen, 2004). An inductive analysis of the data was undertaken through the process of dis-assembling and re-assembling data (Cohen et al., 2011). This progression also involved writing memos to self about the data that were relevant to the research questions and that which were superfluous (Creswell, 2016).

In the third stage, a second and closer reading of each transcript was undertaken to classify the data more methodically (Creswell, 2013). Further generation and assigning of codes took place, more systematically on this occasion, guided by the research questions (Bazeley, 2013). Writing more detailed annotations in the transcript margins also occurred (Johnson & Christensen, 2004). A more targeted 'winnowing' process of omitting data that did not address the research questions was also implemented (Miles & Huberman, 1994).

In the fourth stage, a third reading of the data involved confirming the codes disaggregated in the previous step, and manually highlighting codes using a different colour for each (Guest, Macqueen & Namey, 2012). This represented an important phase in terms of preparation for aggregating the codes to identify significant patterns and conceptual themes in subsequent stages. The penultimate stage of data analysis involved grouping similar codes by moving from individual codes to broader categories, meta-codes, based on recurring concepts within data sets (Bazeley, 2013; Miles et al., 2014). Gaining a conceptual understanding of categories at a higher thematic level,

within and ultimately between data sets based on four individual case studies, was an important precursor to theory development, and testing it against the literature to refine the theory (Creswell, 2016), which occurs in Chapter Eight.

Synthesising meta-codes from across substantial data sets into themes, with a view to building theory, comprised the final stage of the data analysis process. The major findings of this thesis are presented using these themes as sub-headings (Creswell & Creswell, 2018) in subsequent chapters. The data analysis began with specific observations which were assigned codes and developed from there into meta-codes that finally evolved into themes from across four data sets. The "inductive data analysis built categories, patterns, and themes from the bottom up by organising the data into increasingly more conceptually abstract units of information" (Creswell, 2014, p. 186). This model (Creswell, 2013) was selected because the explanations that emerge from it, represent a theory-driven and evidence-based approach to developing the school learning environment to facilitate effective teaching.

3.6 Validity and Reliability

Various strategies recommended in the literature were implemented to ensure the validity and reliability of the data presented in this thesis. First, the interview protocol was carefully constructed over several iterations to enable participants to reconstruct their experiences accurately (Denzin & Lincoln, 2011). Three separate protocols were developed, with a basic stem for all participants, then slightly differentiated questions to cater for the role of the interviewees: principals, HODs, and teachers. 'Road testing' with volunteer participants and revised wording, added to the quality of the questions (Kumar, 2014).

Prior to the interviews, site visits were conducted to develop an in depth understanding of each case and context. During these site visits, participants were given a copy of the interview protocol which was previewed with them to preclude any surprises on the day of the interview. This approach afforded participants the opportunity to prepare for the interview, which contributed to both the quality and fluency of the responses.

Another recommendation in the literature is to reduce researcher bias by adopting an objective research stance or some other measure (Patton, 2015). Reduced researcher bias was achieved by applying the interview protocol consistently to all groups of participants across all four cases (Creswell & Creswell, 2018). Additionally, interviewer effects were limited through neutrality and non-empathic affirmation. The modus operandi for each interview was: ask the question, listen to the response, acknowledge, and record the response using thick description from the respondent's perspective. As a result, the data reflects the unadulterated thoughts and words of the participants, particularly, how they made sense of their own experience, thereby contributing to the validity and reliability of the data (Seidman, 2013).

Triangulation of different data sources: interviews, observation, and document analysis, contributed further to validity and reliability (Denzin & Lincoln, 2011).

Additional cross-referencing was undertaken by presenting outlier views and discussing rival explanations of leadership practices and their effects (Cohen et al., 2011).

Additionally, member checking was used in the post-interview phase to verify the authenticity of the data collected, a crucial strategy for establishing the credibility of the research (Creswell, 2014; Denzin and Lincoln, 2011).

Most importantly, I assured the validity and reliability of the data to a significant extent by using a methodology consistent with accepted research practice. A transparent, consistent, and rigorous process of data collection, analysis, and reporting, employing tried and tested methods, operated at all times (Creswell & Creswell, 2018). A process of constantly returning to and re-examining the data and transforming it into themes, added to the credibility of the findings (Patton, 2015). Maintaining a research journal with a documented audit trail of all research activities and decisions, also added to the overall sense that the data and findings can be trusted (Cohen et al., 2011), due in the main to methodological rigour, credible data sources, and my ethical conduct.

3.7 Ethical considerations

Research ethics are "a set of principles to guide and assist researchers in conducting ethical studies" (Johnson & Christensen, 2004, p. 96). My practice was guided by standards governing the ethical conduct of research, contained in the following guidelines: Australian Code for the Responsible Conduct of Research (2007); National Statement on Ethical Conduct in Human Research (2015); and UNSW Research Code of Conduct. Heeding these documents, the entire thesis was conducted with careful attention to research integrity. Ethical issues, which impact all stages of the research process, were addressed throughout the planning, designing, collecting, analysing, and reporting of data, as recommended in the literature (Kumar, 2014). The ethical issues and challenges I encountered and resolved during this thesis are discussed below.

3.7.1 Planning and designing

The ethical issues implicit in planning and designing the methodology for this thesis were considered in detail, throughout the ethics application process as suggested in the literature (Bryman, 2008). "Ethical issues are an integral part of the planning

stage of all research involving human participants" (Hall, 2008, p. 67). UNSW procedures were followed in gaining clearance to undertake fieldwork. My ethics application (HC16976) was submitted to HREA Panel B on 28 November 2016. The application included the following documentation: project description, risk assessment, invitation to participate letter, PISC Forms, demographic questionnaire, interview protocol, and Head of School approval. The panel met and responded to the application on 13 December 2016. Their response included requests for the following: a rationale for teacher focus groups as opposed to one-on-one interviews, de-identification of focus group participants, and clarification of when and where interviews and focus groups would occur. They also suggested including participants who had been at a particular school for more than 12 months, for reasons which will be explained shortly.

The ethics review panel suggested that one-on-one interviews with teachers may be more appropriate than focus groups. This suggestion was based on the concern that the sensitive nature of some questions with regard to commenting on leadership practices in their school, could potentially preclude some participants from speaking candidly, or alternatively withholding information, thereby limiting the data. Deidentification of focus group participants was highly recommended by the panel, if this method of data collection was to be employed. Focus groups consisting of four to six teachers were included in the original research design, based on the rationale that this method adds variety to the data collection, and social interaction in this environment generates rich data (Creswell, 2013). However, in view of mitigating potential risks to participating teachers, focus groups were omitted as a data collection method due to their ethically sensitive nature in this scenario.

The research design was amended for the re-submission of the ethics application. One-on-one interviews only, were confirmed as the main data collection method. Observation of school events and analysis of strategic planning and curriculum documents were added as primary data sources in the re-submitted ethics application. Also, for risk mitigation purposes, it was emphasised that schools and participants would be de-identified using numerical codes and pseudonyms, in the transcription and reporting of data. This strategy ensured anonymity of schools and confidentiality of teachers, thereby protecting the privacy of the institutions and participants.

The panel also requested some clarification with regard to population and sample selection. In my initial ethics submission, teachers were to be selected on the basis of the length of their service, with a minimum duration of 12 months. On the recommendation of the panel, this criterion was amended to three to five years, in order to select participants who could comment meaningfully on leadership practices in their school over a reasonable period of time. Clarification was also sought in relation to gathering school demographic data. This information is freely available on the MySchool website, therefore, no breach of institutional privacy occurred, and, participants were not required to disclose this information during interviews, which would have prolonged the one-on-one conversations.

Additionally, the panel requested confirmation of the venue and timing of the interviews. My response indicated that interviews would be organised during school hours, at a convenient time for participants. As for a suitable venue, a boardroom or interview room, where privacy and confidentiality could be maintained, would be and were arranged prior to scheduled interviews.

Matters of clarification raised by the Ethics Approval Panel were addressed. My assessment of the risks associated with this thesis, was that the data collected would be of minimal ethical impact because there were no significant risks anticipated. This thesis could, therefore, be classified as 'low risk' to participants and participating institutions. The ethics application was re-submitted to the Ethics Administrator of the Panel on 9 February 2017. Ethics approval was granted on Tuesday 28 February 2017. The process to gain ethics approval took three months. The approval was valid for three years. Data collection and analysis did not exceed the approved timeframe.

3.7.2 Fieldwork and data collection

The major ethical issues that arise in conducting qualitative research are evident in the literature (Cohen et al., 2011; Creswell, 2013). The main ethical responsibility that has guided this research has been the mantra, 'do no harm' to participants (Miles et al., 2014), because they have a right to be protected (Seidman, 1998). "Avoidance of harm is an important ethical principle in social research" (Hall, 2008, p. 69). The principle of *primum non nocere*, do no harm, to individual participants and participating institutions (Cohen et al., 2011; Patton, 2015) was applied by gaining informed consent, as well as maintaining confidentiality and privacy throughout the process of data collection, analysis, and reporting (Silverman, 2005; Twining, Heller, Nussbaum & Tsai, 2016).

Informed consent was gained following full disclosure of my research aims and what voluntary participation would entail. This transparency occurred in written mode via the invitation to participate email and the PISC form. It was also communicated verbally during the initial site visit as well as the participant briefing just prior to commencement of each interview. Confidentiality of data was assured through secure

storage of data in username and password protected databases accessed only by me and my supervisors. Privacy of individuals and schools was ensured through their deidentification using pseudonyms and numerical codes during the data collection, analysis, and reporting stages. Maintaining professional boundaries throughout the process was also an important aspect of ethical research practice. Respecting the participants and sites as entailed in the above strategies, facilitated adherence to principles governing the ethical conduct of research.

3.7.3 Data analysis and reporting of findings

There are several factors during this stage of the thesis, that contributed to the ethical conduct of research. A rigorous methodological approach derived from the literature was applied to data analysis. An objective stance during data analysis ensured research integrity because no biased assumptions or evaluations of the participants occurred during the analysis of the data (Creswell, 2013). Additionally, every effort was made to acknowledge possible researcher bias and limit its potential impact on the research. Further, the conclusions are drawn from participant responses rather than my personal values and beliefs. The findings presented are based on multiple perspectives and alternative viewpoints, including outliers. Finally, the accuracy and credibility of findings are based on transparent and robust data analysis and reporting.

3.8 Role of the Researcher

The nature of qualitative research is such that the researcher is the primary instrument of data collection and analysis. Data is mediated through the researcher, unlike in quantitative research. Therefore, it is difficult to remain entirely neutral (Denzin & Lincoln, 2011). Consequently, the researcher is encouraged to reflect on their role in the inquiry and be sensitive to how their history shapes the study (Creswell,

2016). In the interests of full disclosure, I acknowledge that my professional role as Head of an Independent Secondary School in NSW influenced the selection of schools via sector insider knowledge of principals who had effectively led internally driven reform in their own context. These principals were consequently invited to be part of this study. This professional history also facilitated the establishment of a strong rapport with many participants, particularly the four Heads of School.

Whilst I was aware of camaraderie with participants during fieldwork, I was nonetheless an outsider to the case study sites because there was no direct involvement with respondents beyond this thesis. For this reason, I was able to bring an objectivity to the inquiry which maintained the integrity of the investigation (Kvale, 1996). I also acknowledge that I made decisions regarding exclusion of data irrelevant to the research questions. Whilst being an active participant in the data collection and analysis process, overall, the integrity of the data was maintained at all times.

3.9 Strengths and limitations of the research methodology

This section briefly outlines the strengths and limitations of the methodology adopted for this investigation. During and after the fieldwork, case studies displayed the capacity, particularly the flexibility to accommodate a range of data sources, including semi-structured interviews, observation and document analysis. These data collection methods were not only rigorous, they were also practical and efficient in generating rich data. Further, the social interaction in the interviews, especially the positive rapport built between me and participants, was a rewarding aspect of the fieldwork. Most importantly, complex phenomena were discussed, producing detailed and highly valid responses from participants about their context, from their perspective. Triangulation of data from different sources also strengthened the findings.

While the case study approach is the most appropriate research methodology for this investigation, several limitations should be noted in considering the results presented in this thesis. First, it is difficult to determine the impact of both the interviewer and the participant on the data. The potential for interviewer bias always exists and cannot be eliminated altogether. In a similar vein, data may be biased due to the values, assumptions, and prejudices of the participants. Alternatively, participants may have withheld information, the extent to which cannot be gauged. Second, the findings of case studies are not easily generalisable to other contexts due to the sample size and context specificity, because qualitative researchers do not deal with a sample to population logic (Yin, 2013). Nevertheless, they are generalisable to theoretical or analytical propositions rather than statistical conclusions (Yin, 2014). This capacity to contribute to a knowledge base (Thoonen et al, 2011) through generalising from results to a theory or model, will be explored in Chapter 8.

Another possible limitation is that this kind of cross-sectional study is not ideal for investigating leadership effects over time. A recommendation for future research in this area would be to include a longitudinal dimension. Finally, case studies cannot directly address the issue of cause-and-effect relationships (Yin, 2018). They can, and in this case have addressed the relationship between leadership and the school learning environment, but they are correlational rather than causal.

3.10 Challenges encountered during the thesis

The key challenges I faced are documented in this section. Project management, in relation to achieving research milestones established at annual progress reviews, under tight time and other constraints outlined below, was the most pressing issue.

Working fulltime as Head of a Secondary School, and simultaneously juggling a part-

time doctoral degree with family commitments, was tantamount to operating under some pressure to meet various deadlines and obligations, professional and personal.

A degree of frustration was experienced at the hands of gatekeepers in schools (Seidman, 1998). There was often lack of access to principals because their handlers such as an executive assistant, would not forward recruitment emails in a timely manner. Even when such emails reached the desired recipient, significant periods of time would elapse waiting for responses from the Head of School, or more often their delegate. Then there were the other 50% of invitees who never responded at all to the invitation to participate, despite several follow-up emails and telephone calls.

Once the green light to proceed with fieldwork was received, other factors played a part in challenging my patience and resolve. The logistics of organising multiple visits across four sites during term time, proved to be quite demanding. Including travel time, a single site visit consumed the best part of a working day. In total, there were four visits per site – a preliminary appointment to meet the study population and discuss research aims, and three subsequent outings to conduct interviews and observations, as well as undertake document analysis. In the context of multiple site visits to each location, including travel, the time required to undertake qualitative fieldwork is not to be under-estimated.

The time consuming and labour-intensive nature of the qualitative research process (Miles & Huberman, 1994) became evident in other areas. The interview schedules were developed and amended on multiple occasions to cater for the everchanging circumstances of 40 busy participants. The interviews themselves were particularly time consuming and labour intensive. "Interviewing research takes a great deal of time, and sometimes, money" (Seidman, 2013, p. 5). Whilst financial constraints

were not an issue, time certainly was of the essence, particularly with limited human resources. Transcription was time consuming due to the sheer volume of data.

Preparing and organising this great mass of data for analysis, and painstakingly analysing a huge volume of data, and then reporting the findings, consumed an enormous quantity of both time and labour, precious commodities when dealing with the demands of this day and age. Despite the challenges noted here, they are far outweighed by the rewards of the research journey.

3.11 Conclusion

Chapters 4 to 7 report the key findings from each of the case studies, aligned to the research questions guiding this thesis. The volume of data collected and analysed, produced substantive findings that could not be presented practicably in one chapter. Therefore, each chapter examines a separate case study, in the chronological sequence in which the fieldwork was conducted. The findings are presented according to the themes that emerged from the data, a common practice in qualitative research (Creswell & Creswell, 2018). Grounded in the empirical data, the findings are explored in greater detail within a cross-case comparison in Chapter 8, enabling a process of constant comparative analysis to be undertaken (Patton, 2015). They are used to discuss, theory-driven, evidence-based approaches to leading school improvement. Their significance is discussed in relation to the conceptual framework outlined in Chapter 2, emphasising the contribution of this thesis to knowledge gaps in the field.

The next chapter reports the findings from Case Study One. Findings grounded in the empirical data will be used to discuss theory-driven and evidence-based approaches to leading improvement reforms in relation to enhancing the school learning environment and teaching.

Chapter 4 - It's all about the culture

4.0 Introduction

This chapter presents the main findings from Case Study One, which was most distinctive in terms of the extent of its coherent and cohesive reform agenda. A highly integrated strategic plan articulated a new educational direction for the School, which will be discussed in detail. This roadmap was based on a collaboratively established, fit-for-purpose, school wide pedagogical framework, which created a common language of learning that connected teachers and students in the classroom (Andrews & Conway, 2020). Another distinguishing feature of this case was the effective alignment of systems, processes, and most teachers to this blueprint, and how it was achieved through the establishment of a psychologically safe (Schein, 2015) and collaborative organisational culture, by the Principal and broader Leadership Team. The main contribution of Case Study One to this thesis is its examination of the relationship between school culture and improvement, which is not explored at length in the School Effectiveness and School Improvement research (Murphy & Torre, 2014). This case study clearly demonstrates how leaders establish a culture that contributes positively to the school learning environment.

4.1 Research Question One

What practices are implemented by school leaders to improve the school learning environment?

School leadership as defined in Chapter 2, is a process of influence that aligns teachers and other key stakeholders to the educational direction of the school aimed at improving student outcomes (Hallinger & Heck, 2009). As discussed in the literature review, leadership influence is mediated through school conditions (Hallinger & Heck, 1998). These conditions, specifically the learning environment at both a school and

faculty level, is defined in terms of the following qualitative characteristics in the DMEE (Creemers & Kyriakides, 2008): collaboration between teachers to improve pedagogy, provision of learning resources, developing positive attitudes to learning, managing student attendance and behaviour, and establishing a partnership with parents and the community.

The practices implemented by the Principal and other leaders to improve the school learning environment, and the processes they consist of, are presented below as sub-headings according to the five major themes that emerged from the data, common to all four case studies.

4.1.1 Establishing a school improvement agenda

School improvement as also defined in Chapter 2, is a systematic approach to change, focusing on developing the conditions and processes that enhance organisational and instructional capacity to boost student outcomes (Hopkins et al, 1994). Establishing a blueprint for school improvement, referred to in the literature as 'direction setting' (Leithwood & Riehl, 2003), was found to be a major leadership practice of the Principal. She was appointed by the Board of Directors in 2013 to transform the school learning environment in order to lift student academic performance, following a long period of stasis. Consequently, the Principal took office with a clearly defined school improvement agenda, based on internal reform to meet the demands and needs of internal stakeholders. Her vision centred on instilling in students a lifelong love of learning, empowering them to take ownership of their learning, and then develop knowledge and skills for life.

The Principal made learning the core business of the College through a process of creating a school wide perspective on the new learning direction, and stimulating

dialogue about it among parents, students and teachers. This vision for learning was clearly articulated to the whole school community through the Strategic Plan. "Our most important strategic priority is to improve the quality of teaching and learning across the school. Everything has been focused on that" (Principal). The desired effect, by recording it in the institution's most public document, endorsed by its peak governing body, meant that it was a constant reminder to stakeholders about the new learning direction of the School. "We lacked direction. What the new leadership team has done is to prioritise teaching and learning in the strategic plan. So, we're constantly focusing on those whole school goals" (HOD 2). In this context, leadership for learning was based on the development of a school wide approach to improving teaching and learning (Conway & Andrews, 2016) and contributed to effective organisational synergy in this regard (Andrews & Lewis, 2004).

Another significant finding in Case Study One, was the practice of under-writing a vision with authority and legitimacy by operationalising it as goals in the Strategic Plan. As will be discussed subsequently in Research Question Three, a blueprint for whole school improvement was also critical in aligning all faculties to the internal reform agenda. The progress of improvement in Case Study One, at a whole school or meso level, could be attributed to a significant extent, to the capacity of the Principal to clearly set a direction for the School and align most stakeholders to it through strategic planning and action.

Goal One in the Strategic Plan was to create self-directed, skilled 21st Century learners via the implementation of the Assessment for Learning [AFL] Framework. "For the first time, the school has a whole school approach to pedagogy. We now have a direction in terms of where we are going with teaching and learning" (HOD 3). "Prior to

the implementation of AFL, there was no direction. Now we've been given a direction based on research and evidence" (HOD 1). The development of the AFL Framework was clearly effective in focusing teachers on this blueprint to improve learning. Its greatest strength was that it represented a single, central, unifying force that all teacher professional learning and teaching efforts were aligned to. All too often, in my experience, Heads of School commit to a reform agenda that is too expansive and lacking cohesion. A further significant finding, therefore, was that the critical factor in direction setting is that it should engage and orient stakeholders to a specific objective devoid of distractions such as competing agendas.

Goal Two was to develop teachers as facilitators of learning through the process of establishing PLCs, at whole school and faculty level. PLCs refer to a group of teachers who share a common purpose to collaboratively improve instructional capacity and consequently student outcomes (Stoll, 2009). These learning communities, guided by the Research Team, facilitated professional dialogue informed by the relevant literature. They facilitated the implementation of the AFL Framework as a collaborative enterprise, contributing to the transformation of pedagogy from teacher-centred to student-focused lessons. "For teachers, it's about delivering quality learning. For students, it's about developing that love of learning, and being motivated to learn" (Teacher 5). This approach had a significant effect in terms of motivating and supporting teachers to achieve the strategic priorities of the School. The main finding in relation to PLCs, was their solitary focus on implementing the AFL Framework in pursuit of improved teaching and learning. The two goals in the Strategic Plan discussed thus far, were highly integrated, and not in competition, thereby adding considerably to school improvement momentum.

4.1.2 Embedding a learning culture in the school

Developing an organisational culture conducive to the concurrent learning of students and teachers as a community of learners, aimed at improving the school learning environment, was also found to be a significant leadership practice of the Principal. Having secured support from the Board for her school improvement reforms, the Principal and SLT embarked on an institutional plan to achieve the vision through establishing a culture that would support the learning of students and teachers. "It's all about the culture. The SLT have created a culture where teachers work hard and collaborate to improve teaching and learning" (HOD 1). "There's a strong culture of learning here. In class the students are positive and engaged" (Teacher 4). Participant responses indicated that a robust learning culture had been established for students and teachers as a result of a process of engaging the support of major stakeholders, through constant dialogue via face-to-face communication, the School website and newsletter. The Principal and SLT had essentially established a school re-culturing by establishing a new educational direction, along with complementary structures and processes (Chew & Andrews, 2010). It is worth noting, that the desired culture was not created overnight. The underpinning structures and processes took two to three years to achieve the required outcome, as verified by many of the participants.

School culture and its role in improvement, have been paid scant attention in School Effectiveness and School Improvement research (Murphy & Torre, 2014).

Notwithstanding that, one of the significant findings of this case study, was that the Head of School went to great lengths to establish a culture that facilitated the reform agenda. In this instance, the culture of learning facilitated the strategic goals of the organisation. It was clearly evident from researcher observation and participant

interviews that in this learning environment, the key components of opportunities to learn, maximising learning time, and establishing high academic expectations (Creemers & Kyriakides, 2012), were key priorities.

However, there were voices in the School that, whilst optimistic about the learning culture changing for the better, assessed the ongoing transformation in positive yet realistic terms. "So, there's that change in culture that's taking time to adjust to. We're slowly getting there. It's unrealistic to expect that the whole school is going to be on board in three years. We've got a bit of a way to go" (Teacher 1).

The Head of School also acknowledged that there was much to be done in terms of informing parents about the changing learning culture. "I don't think we've communicated exactly the enormity of what we've undertaken and what we've achieved over the last couple of years. We need to do more about that" (Principal). Nevertheless, there was strong consensus amongst participants that the new learning culture was contributing to a positive school learning environment. Whilst gains had been made in this area, it was certainly a work in progress.

Implementing systems to align all dimensions in the College to improving the school learning environment, was an important strategy in the Principal's repertoire. The Research Team played an important role in the process. "As part of that implementation, we've established a Research Team from across all disciplines. Eight people in total in this steering committee, who are helping drive the agenda" (Principal). This group was instrumental in bringing to light international research on best practice pedagogy and using it to stimulate dialogue about effective teaching. Additionally, the appointment of a Director of Learning Innovation was significant in terms of collectively driving the agenda of supporting HODs and teachers to improve their classroom

practice. These initiatives represented important innovations aimed at achieving school strategic goals. Overall, it meant that the SLT was not exclusively responsible for driving the improvement agenda. They could now share that responsibility with others. The fact that the Research Team was an inter-faculty group which was not part of the SLT, enabled it to garner broad support for improving teaching and learning based on global research and best practice. Additionally, the appointment of the Director of Learning Innovation was welcomed by teachers as an important resource in supporting them to improve teaching and learning. In tandem, they were responsible in no small part for developing a learning culture among teachers and reducing much of their reluctance to support the new direction of the School.

Together with the above systems, the establishment of PLCs meant the School was gradually transforming into a learning organisation. Another contributing factor was establishing weekly professional learning sessions focused on embedding evidence-based practice in classrooms. "That's where the professional learning is at its greatest. We learn a lot in those meetings about what we can do to improve teaching and learning" (HOD 1). In addition to curriculum leaders, teachers could also see the benefits of PLCs. "It's created a strong culture where there's constant discussion of pedagogy, particularly areas of development. The collaboration across disciplines and departments, is really beneficial. More sharing of ideas. More dialogue about how to improve practice" (Teacher 5). In this context teachers were encouraged and supported to improve their pedagogy in a safe and secure environment, with the freedom to innovate and develop effective pedagogy. The significant finding here was that teachers were secure in the knowledge that they were not being judged on their performance.

This realisation lifted a substantial burden from their shoulders and encouraged them to experiment with different pedagogies, knowing they were guaranteed job security.

Allocation of resources to support teaching and learning was another important leadership practice in relation to creating a robust learning culture to facilitate improvement in pedagogy. The College was successful in securing a substantial windfall to finance school improvement projects. "We are very fortunate in that we received a grant from the AIS of just over \$145,000 to help us with the implementation of the AFL Framework" (Principal). Most of this funding was assigned to teacher professional learning. This will be elaborated upon subsequently in the exploration of leadership practices focusing on the development of teachers.

For the purpose of the immediate discussion on resource allocation, some funds from this grant were earmarked for expenditure on projects to upgrade infrastructure to enhance the physical teaching and learning environment. The allocation of this grant to other school improvement projects will be examined in later sections. An important finding in relation to resource allocation was its boost to the morale and practice of teachers. They were provided with the required financial and human resources to bring to fruition the slated improvement to teaching and learning. Teachers were given both the new learning direction and the means with which to achieve it, a rare combination in secondary schools in my experience. Above all, they felt valued, a great motivating factor for them.

4.1.3 Leading teaching and learning

At a school level, Case Study One had placed enhancing pedagogy at the centre of school improvement (Andrews & Lewis, 2004). This strategy was driven by evidence from other school systems, brought to light by the Research Team. For example, a two

year study in the US found that teacher professional learning is more likely to enhance student outcomes when it is sustained and directed by principals to specific instructional goals (Newmann, King & Young, 2000). Another study found that engaging teachers in collaborative professional learning that is linked to their everyday practice is more likely to make a positive difference to student learning (Harris & Jones, 2019).

Strong instructional leadership by the Principal, and Deputy Principal in particular, and to a lesser extent the Director of Innovative Learning, was a vital practice in terms of achieving the reform agenda. The SLT was instrumental in introducing a new whole school pedagogical model, the 'AFL Framework'. They led professional learning sessions, attended faculty meetings, supported teachers to enhance their pedagogy through coaching and mentoring meetings known as 'Open to Learning' conversations, undertook lesson observation and provided feedback in conjunction with HODs in 'Swivl' sessions, which will be elaborated on shortly.

The SLT also monitored progress in teaching and learning. The Deputy Principal, appointed on the basis of his curriculum expertise, was recognised as an authority. "The Deputy Principal is very knowledgeable. He is well respected in the School" (HOD 2). He was also respected for leading professional dialogue and modelling best practice pedagogy. "The Deputy Principal practises what he preaches in his own classroom.

Teachers from his own department, and from other departments, have observed him.

I've learnt a lot from him. I think we all have" (Teacher 1). Participants also commented that he took a lead role in implementing the AFL Framework, constantly evaluating the curriculum, and consequently modifying programs, in collaboration with HODs and teachers. His capacity to lead by example was instrumental in establishing his credibility, as well as motivating and supporting teachers to improve their practice.

Another significant instructional leadership practice was allocating resources to facilitate effective teaching and learning. This was categorised as Goal 3 in the Strategic Plan. Although an objective in its own right, it essentially played a supporting role to Goal 1 and 2. Improving information technology [IT] infrastructure formed the basis of this objective. "The SLT has invested heavily in technology in the last three years" (HOD 4). "A lot of planning and investment have gone into IT" (Teacher 1). Campus wide wi-fi was installed to facilitate the 'Bring Your Own Device' policy, whereby teachers and students had uninterrupted on-site access to the Learning Management System [LMS] CANVAS. This represented an important step in the process of contributing to the main strategic goal of creating self-directed, 21st Century learners. "Students can have constant interaction with their teachers. They can access course work and resources at any time" (HOD 2). "With CANVAS and all the technological resources we now have access to, it's so much easier to keep students engaged" (Teacher 4). Curriculum leaders and teachers alike, commented on the positive outcomes made possible by the implementation of this LMS. An orderly environment was clearly observable during several site visits, where students were actively engaged in learning, facilitated by CANVAS. It was also apparent that teachers for the most part had developed themselves to become confident users of this technology. Many had certainly embraced and embedded it to good effect in their daily practice.

Improvements to teaching and learning spaces were well underway, although still a work in progress. A staged roll out of upgrade projects was continuing during the fieldwork conducted at the College. Further refurbishment was also slated in upcoming months. "We're going to re-create the learning spaces. I'm talking about re-shaping the classrooms, far more open learning spaces and desks that can be moved around for

collaborative learning" (Principal). Despite the ongoing enhancements to facilities, some teachers experienced a certain level of frustration that learning spaces were not optimal in certain subjects. "The physical infra-structure is a bit of a downside at this point in time. That's a limitation for sure. We have enough equipment. But we don't have adequate performance spaces. But improvements to the campus are in the pipeline" (Teacher 2). These planned improvements seemed to appease, to an extent, the teachers who were frustrated at the current state of learning spaces impacting their subject, such as in the Performing Arts. This faculty required a range of performance spaces which were simply not available or had not yet been created. Therefore, they had to improvise or make do with what they had, sustained by the promise of better facilities to come. By and large though, the physical environs were certainly conducive to effective teaching and learning.

4.1.4 Leading change

Participants described the Principal as an inspirational instructional and transformational leader, skilled in leading teaching and learning. Her approach to school improvement was consistent with the main theoretical assumption underpinning this thesis. That is, she simultaneously implemented a range of instructional and transformational practices in an integrated and distributed way to develop the school learning environment and improve teaching. In terms of the latter, the leadership style attributed to her was, a 'hands-on' approach to motivate staff, secure support for her vision, and align all structures and processes in the School to learning. Successfully leading change was also an integral part of her repertoire of leadership practices. Vital to this process was first securing the support of the Board. Next, she communicated to the School community, a compelling vision for change. The appointments of a new

Deputy Principal and Director of Learning Innovation, as well as the establishment of the Research Team, were important milestones in building a team to drive school level change to create the conditions that support teaching and learning. This group, including the Principal, collectively embarked upon a course of action to engage stakeholders, particularly teachers and parents. According to participants, students were the least resistant group and most supportive of the new educational direction.

The commitment of teachers to the vision was gained by the SLT creating a supportive environment for staff and students to experiment with new teaching and learning approaches. They successfully created a psychological safety (Schein, 2015) in the minds of teachers to facilitate change. "I have to say I am quite fortunate. I don't think there is a single staff member sabotaging this approach" (Principal). Responses from HODs and teachers supported the notion that teachers were implementing new instructional approaches in the classroom. Risk taking in terms of trialling new pedagogical methods was encouraged. The support of parents was garnered through a communication strategy which involved educating them about the new learning direction of the School, through the website, newsletters, annual reports, parent information evenings, and seminars for parents on topics such as 'How to interpret NAPLAN data'. Nevertheless, as the Principal acknowledged earlier, there was room for improvement in communication to, and engagement of, the parent body.

Leading change is often alluded to in the School Effectiveness and School Improvement research. However, a significant finding in this thesis was the processes implemented by leaders to engage stakeholders in school reform. Gaining broad based support for the new school improvement agenda involved cascading the vision from the top of the hierarchy, starting with the Principal, through the Deputy Principal and SLT,

to the Research Team and HODs, down to rank and file teachers, as well as parents and students. Strong alignment to the vision is evident in the following data. "The Principal has been instrumental in moving the School forward. She has predominantly facilitated change through dialogue with the Board and securing the funding to support the changes" (HOD 3). "Change has come from the very top, the Principal. However, our main leader on the ground has been the Deputy Principal, in the practical sense of implementing the AFL Framework in the classroom" (Teacher 2). "The Principal and Deputy Principal are essentially leading change in the School. But it filters down from there to the HODs and then teachers" (Teacher 1). It is clear from these and ensuing data that change was being led effectively at the school level. "After three years I think most teachers are now on board with the new changes. We've come through the tough times of implementing change and I think we're stronger for it" (HOD 2). Despite the optimism, others were more cautious. "I would say it's going well, but I wouldn't say it's completely embedded in the school. I'm not sure it ever can be completely." (Teacher 2). "The change has been really positive. However, the challenge is to move all staff" (HOD 1). There was strong consensus that sustained change in the School was being led effectively. Nevertheless, more than one respondent identified the obstacle to successfully leading change in a secondary school context.

There was acknowledgment that some pockets of resistance to this significant shift in the direction of the College existed and not all teachers were 'totally on board' with respect to embedding a different learning agenda across the School. "Whilst we're moving down that path, not everyone is on board yet. I have one colleague in my department who has been a bit reluctant to embrace change. He's trying. But change is not always implemented as quickly as one would like" (HOD 3). The same sentiment

was re-iterated by teachers. "We are all expected to implement the AFL Framework in the classroom. Whether everyone is doing that to the extent that is expected is another thing" (Teacher 1). Although a certain comfort level was created through a non-judgmental and non-threatening culture, some teachers were slower than others to move with the times.

A possible explanation for the reluctance of some teachers to embrace change was the desire to maintain historically strong Higher School Certificate (HSC) results whilst simultaneously implementing a new vision for learning. "There's always the tension in schools between teachers wanting to deliver best practice and students wanting the best possible HSC results. There's so much at stake in the HSC that good learning gets sacrificed for a good ATAR" (Teacher 3). As will be seen in subsequent chapters, this dilemma was also apparent in other case studies. Whilst this tangible tension was as yet unresolved in this School, respondents were optimistic that the AFL Framework was improving the quality of teaching overall. According to them, this was certainly the scenario in the junior school and beginning to emerge in Year 11 and 12.

4.1.5 Distributing leadership

A significant finding in this case study was the specific distributed or shared leadership for learning model, and the processes implemented to achieve reform. The Principal acknowledged that leading school improvement was too demanding a task for one person. She considered it every teacher's responsibility (Andrews & Conway, 2020). A guiding coalition (Kotter, 2012) to share leadership of change and achieve School strategic goals was therefore a crucial leadership practice embedded in the College. "We all have different strengths and abilities. We value and respect those and work together for the benefit of students. So, this is a distributed leadership approach really. The SLT

share the leadership of teaching and learning. But, everybody is seen as a leader of learning" (Principal).

Distributed leadership practice in the School was also corroborated by teachers. "It's the Principal. It's her vision. It's also the Deputy Principal. He's more hands on in terms of working with HODs and individual teachers. It's the HODs as well. It's the whole school really. It's no longer top heavy. We're all leading it" (Teacher 3). One participant made the distinction between historical and contemporary school leadership. "In the past we've had a very top-down approach. The current Principal has brought in a very collaborative, team-based approach to change. I would say the school needed that, so we are moving in the right direction" (Teacher 4). These data suggest that teachers were aware that the leadership of school improvement in this context was very much a collaborative endeavour. According to the 'heroic leader' model of leadership discussed in Chapter 2, the Principal alone would be leading change and improvement. Historically, this was certainly the perception of leadership, if not the reality. However, in the modern era, as found in Case Study One, shared leadership for learning is normative practice and an essential requirement of leading school improvement in this context.

A clear distinction also existed between the role of the Head of School and that of others in this distributed leadership model. The Principal was concerned primarily with strategic matters such as working with the Board and parents, developing and implementing the Strategic Plan, and securing financial resources to support reform. The Deputy Principal functioned at a predominantly whole school level, working with HODs and teachers to embed best practice pedagogy in the College. The Director of Innovative Learning was also assisting HODs and teachers to transform their pedagogy,

although, more at a faculty level. The role of the Research Team was to disseminate the learning vision across the School, align HODs to this direction, and develop evidence-based pedagogy in all teachers. A flatter leadership model that is critical to distributed leadership (Harris, 2005) was clearly evident in this case study.

The guiding coalition just described, drove change collaboratively according to a differentiated model. "The Principal oversees everything. The Deputy Principal is running professional learning, driving the implementation of the AFL Framework and providing resources for teachers. The Director of Innovative Learning is working with faculties. The Research Team makes available the literature on best practice" (HOD 3). Overall, the data gathered in interviews and from observation indicated that the SLT not only practised effective distributed leadership, they also modelled it to teachers. The model was followed at a faculty level, where the HOD shared leadership with teachers based on their experience and expertise in pedagogy, as well as their commitment to the improvement agenda, rather than appointment to a formal role. Shared leadership of reform was clearly an effective practice in this organisation.

4.2 Summary of Findings

In Case Study One the Principal and SLT effectively developed the school learning environment and improved teaching through a range of instructional and transformational leadership practices, implemented in an integrated and distributed way. This finding is consistent with the main theoretical assumption underpinning this thesis. First and foremost, a blueprint for school improvement was developed and endorsed by the Board. Securing this mandate enabled the Head of School to exercise leadership influence through setting direction for the College. Motivating most stakeholders with a new vision for learning facilitated their gradual alignment to the

strategic plan through a filtering process from the senior leadership of the institution down to teachers.

The Principal was well aware of the appetite for innovation among stakeholders in this context and responded accordingly with her strategy of incremental change in a psychologically safe and supportive environment. Another important feature in the effectiveness of school reform in this context was a singular focus on the implementation of the AFL Framework as the designated apparatus to enhance teaching and learning. A more integrated and cohesive approach to school improvement was evident as a result, with all structures and processes in the School aligned to this mechanism. It led to certainty among teachers as to where to direct their focus and energy. As a consequence, change fatigue and resistance were not as evident in this organisation, as for example in Case Study Four.

Another significant reason for the effectiveness of reform, was the personnel available to support the Principal in leading school improvement. Strategic appointments such as the Deputy Principal were made, to lead alongside the Head of School. A new role, the Director of Innovative Learning, was created to support faculties to implement the AFL Framework. In addition, the inter-faculty Research Team was established to function as a steering committee to embed evidence-based practice in all departments. This guiding coalition shared the workload and responsibility for implementing change. Additionally, it was instrumental in contributing to a collaborative culture in the organisation. Therefore, sharing of leadership according to passion and area of expertise was found to be an effective strategy in leading reform.

Collaboration was evident to me in two main areas, the distributed model of leadership, and in PLCs as teachers strove to enhance their pedagogy in a non-

threatening environment. This collaborative, non-judgemental culture laid the foundation for gradually transforming the institution into a learning organisation. The allocation of human and financial resources to support teaching and learning served to strengthen this culture. In effect, the Principal and SLT created a culture that was facilitating reform rather than working against it.

4.3 Research Question Two

What practices are implemented by faculty leaders to improve the faculty learning environment?

The practices implemented by middle leaders to improve the faculty learning environment, and processes they consist of, are presented below as sub-headings according to the five qualitative characteristics in the DMEE (Creemers & Kyriakides, 2008), identified earlier in this chapter. This pattern will be followed in reporting the findings from all case studies, in relation to this research question. A significant finding in Case Study One was the extent of instructional leadership provided by HODs at a faculty or macro level.

4.3.1 Developing effective teaching

In the absence of Assistant Heads of Department, the formal leadership of each faculty was the sole responsibility of the HOD. Nevertheless, they often shared leadership with senior teachers not appointed to formal leadership roles. These were trusted peers with several years teaching experience and curriculum expertise who supported the major goal of building the instructional capacity of teachers. The main strategy therein focused on enhancing teacher agency (Conway & Andrews, 2016) within a faculty-based PLC. The strategic practices and processes implemented to develop effective teaching were a significant finding in this case study.

In this context, teachers were considered to be learners, much the same as students. Their learning, particularly in relation to best practice pedagogy, was stimulated by current literature provided by the Research Team. "In our department meetings, we constantly discuss pedagogy and how we can improve on it" (HOD 2). "We are trying new approaches and methodologies suggested by the Research Team" (HOD 4). "We're differentiating the curriculum now based on the Maker Model. So, we're looking at different types and methods of assessment" (HOD 1). Teacher professional learning at faculty level, facilitated by the HOD, senior teachers and the Research Team, was found to be an effective practice in facilitating improvement in teacher effectiveness. Targeted areas of improvement included catering for individual differences in the classroom and assessing student learning in a variety of ways.

Discussion of pedagogy was the catalyst for action in the process of developing quality instruction. In this regard, HODs were proactively leading teaching and learning. An integral aspect of leadership at a faculty level consisted of integrating the AFL Framework into all teaching programs. "It is now embedded in our teaching programs and assessment tasks" (HOD 4). "We meet in our department and set quality assessment for learning tasks and activities. The AFL Framework and a common language around assessment are embedded in our programs. So, I think the quality of our programs has improved" (Teacher 5). At the time this fieldwork was being conducted, departments were occupied in writing new Stage 6 (Year 11 & 12) programs in English, Mathematics and Science, as required by the NSW Education Standards Authority [NESA], which had recently released the latest syllabuses in these subjects. Teachers were also in the process of re-writing Stage 4 (Year 7 & 8) and 5 (Year 9 & 10) programs based on the AFL Framework. Reducing content and focusing on developing skills in students, was a

crucial component in program development. It also involved re-writing assessment tasks to be formative rather than summative. However, as noted previously, the uptake of the new Framework was slower in some quarters than in others. "Teachers are at different levels of adopting the AFL Framework, so it's taking time to embed it in our faculty. It's a work in progress" (Teacher 5). This posed a challenge for both middle and senior leaders, to achieve consistency in its implementation across all faculties. The concept of a 'work in progress' was a recurring theme in school improvement reforms in Case Study One. The Principal was prepared to accept that teachers were at different levels and stages in terms of their professional learning and implementation of change.

Overall, a strong consensus existed that teacher collaboration had become de rigueur in the institution. "The collaboration across disciplines and departments, is really beneficial. We meet in our faculty and set quality assessment for learning tasks and activities" (Teacher 5). "My HOD gives me the freedom to try different approaches in the classroom and contribute ideas in our department meetings. So it's a collaborative thing" (Teacher 4). The development of a collaborative culture in departments, had facilitated the transition from a focus on testing and marks, to learning for its intrinsic value. It had also enabled lesson planning using the common language of learning such as 'Learning Intentions' and 'Success Criteria' (Hattie, 2009). Collaboration had also assisted with the development of strategies for teachers to be facilitators of learning by reducing content and concentrating on skill development, team teaching, setting innovative assessment tasks, and improving formative feedback to students.

A vital practice in developing effective teaching on an individual basis, rested on mentoring of less experienced teachers by the HOD and senior teachers in the faculty. Integral to this approach was the 'Swivl' method, involving observation of lessons, followed by feedback, which led to modifications to teaching practice and further reiterative cycles of observation and feedback. "We have 'Open to Learning' conversations about what we are doing in our classes with regard to assessment for learning. The HOD gives us feedback and suggests other ideas and approaches which we then take on board" (Teacher 2). "So, the HOD observes teachers in the classroom and discusses feedback with them. That mentoring is really valuable in terms of developing effective teaching. It also develops a good support network between the teacher, their HOD, and the Executive" (Teacher 5). These mentoring sessions contributed to reflexive practice becoming an integral part of a teacher's process of self-improvement.

Conducting student evaluations of teacher performance had also become a standardised process in teacher reflection and self-evaluation, as well as developing in teachers, accountability to their students and faculty, ahead of the Principal. Another significant finding was that some participants considered internal accountability a greater motivational force than direct answerability to the SLT. This confirms a finding in the literature that internal accountability tended to motivate teachers which subsequently led to enhanced institutional capacity and performance (Newmann, King & Rigdon, 1997).

4.3.2 Allocating resources to support teaching and learning

Another leadership practice employed by HODs to improve the faculty learning environment, and one closely aligned to developing effective teaching at a classroom or micro level, was the provision of resources to facilitate quality teaching and learning. An important piece of data discussed earlier, was the School's significant investment in IT over the past three years, particularly the installation of CANVAS. The feedback from

participants was positive with regard to the outcomes of the new student LMS. "I find it a great resource for students. It's allowed me to 'flip the classroom'. In terms of assessment, it works beautifully with the AFL Framework" (Teacher 1). A significant finding in this context was that learning was becoming more interactive and engaging, enabling teachers to introduce innovations such as 'flipping the classroom' and changing their role to becoming facilitators of learning, in keeping with the new strategic direction of the School.

HODs were provided extensive training at their designated curriculum meetings to enable them to implement the new LMS. It was then incumbent upon them to train their faculty in turn. A professional learning budget was available for training purposes, including the acquisition of related software. Relief from face-to-face teaching was required for HODs to train their teachers in the use of CANVAS. Alternatively, in some faculties, more technically proficient teachers were supporting less-adept teachers in the adoption of the new system in what was essentially a collaborative enterprise of upskilling all teachers. The significant investment in this platform was contributing to the desired result of improving the faculty learning environment.

4.3.3 Developing positive attitudes to learning in students

The implementation of CANVAS was contributing to greater engagement in learning and empowering students to take ownership of their learning. "There has been a change in students' attitude to learning and how they learn. More ownership of their learning. More self-directed. More student-centred. More groupwork. More independent research. More presentation of their work in class" (Teacher 2). This transformation, in tandem with the introduction of the AFL Framework, was changing the mindset of students from passive to active, self-directed learners. It also included teachers focusing

on meta-learning, inviting their charges to become more cognisant of their learning preferences, as well as critically minded and reflective learners. Integral to this new wave of learning was providing students greater learning opportunities to develop the higher order thinking skills and independence required of successful learners. Greater opportunities for learner engagement were accompanied by constant encouragement to enjoy the learning process in a supportive environment where it is acceptable to take risks and fail. In this context, protecting learning time by minimising disruptions, leading to more time on task, was also critical to student engagement. All the while, teachers continued to maintain high academic expectations of students based on producing their personal best in each and every assessment task, rather than competing against their peers.

4.3.4 Managing student attendance and behaviour

The College had implemented clear policies for managing students, based on the principles of Positive Behaviours for Learning. However, according to one participant, the SLT and the HODs needed to address this issue further because not all teachers were following policy, leading to inconsistent behaviour management. "An area where the School could improve is behaviour management. There is a system in place, but I don't know that everyone follows it. There's inconsistency in this regard which can create tension between teachers and students" (Teacher 2). In the greater scheme of things, managing student behaviour was not a significant issue in this context. My observations, based on multiple visits to the institution, were that students were very compliant with policies and expectations. They were certainly highly engaged in their learning during lessons, which may have alleviated potential behavioural issues.

Nevertheless, the perceived inconsistency in student management was raised by only

one participant, who believed this issue needed addressing to maintain consistent expectations and standards of conduct across the School.

4.3.5 Engaging parents in the learning agenda

Goal 5 in the Strategic Plan was to establish a strong, positive parent engagement strategy. As the primary educators of their children, engaging parents as partners in the educative process was considered crucial in achieving the mission of the School.

Developing faculty goals that dovetailed with whole school strategic priorities, was the remit of HODs. The predominant practice they drew upon to sustain a partnership with parents was to maintain open lines of communication via telephone, email, the student diary, and parent/teacher conferences. Other traditional means of interaction, such as parent satisfaction surveys, were administered annually. A more contemporary online method, CANVAS, kept parents informed through the online parent portal.

One participant, who was appreciative of parental support, identified a source of angst in relation to community expectations. "There is some tension between parent expectation of achieving high marks, such as in the HSC, and creating a love of learning" (Teacher 2). She also acknowledged that the transition to the new AFL Framework in Year 7-10 was less problematic because the stakes were not as high in comparison to the HSC. The overall impression I gained was that parents in this community were valued as partners in the education process, and opportunities were sought to engage them meaningfully. The main finding in this regard was that a proactive parent engagement strategy had strengthened the partnership between the School and parent body, who by and large, supported the reforms implemented by the Principal and her team of teachers.

4.4 Summary of Findings

A major finding in this case study was the extent of HOD instructional leadership at department level and processes involved in developing the faculty learning environment. PLCs were well established and functioning effectively as the main forum in which to build instructional capacity and teacher agency. A substantial level of dialogue about pedagogy, in particular the sharing of practice within and between departments, was reported by participants and observed by me in whole staff and faculty meetings. A good deal of coherence existed in relation to implementing curriculum reform in the form of the AFL Framework.

My close analysis of teaching and learning programs, and other curriculum documentation, found that new NESA syllabus implementation demonstrated innovation in assessment and teaching practices such as the 'flipped classroom'. HODs were also found to be effectively leading mentoring and coaching of teachers through 'Open to Learning' conversations. As a result, teachers were well on the way to becoming reflexive practitioners, increasingly accountable to their peers for their professional performance.

Another important finding was the strategic expenditure on resourcing teaching and learning. The upgrade to learning spaces and implementation of CANVAS contributed to a greater level of student engagement and ownership of learning than previously existed. High academic expectations, maximising learning time by limiting disruptions to lessons, and optimising time on task in class, were priorities that were clearly evident in walk-throughs by the Deputy Principal accompanied by me. These initiatives, in combination with the implementation of a 'Positive Behaviours for Learning' Framework, had a positive impact on reducing student management issues.

Finally, it was found that the parent body was supportive of the changes occurring at the School, and more engaged in the process through the online parent portal in CANVAS and more traditional methods of communication.

4.5 Research Question Three

What practices are implemented by school and faculty leaders to align the faculty learning environment to the school learning environment?

The predominant practice employed by the SLT to achieve its school improvement goals, was communication via face-to-face meetings, either with the entire staff, or particular groups of teachers, depending on their role. "All our meetings across the school and with each department have focused on the implementation of the AFL Framework. This reinforces in each faculty, the changes occurring at a whole school level" (Principal). Weekly professional learning sessions, involving all teachers, presented an ideal forum in which to discuss the new learning direction, and provide the requisite training and development for teachers to effectively achieve this common goal. As a follow-up to these forums, the SLT conducted meetings with HODs collectively, then separately with each faculty, to support them to progress the reform agenda. Macro level changes were also reinforced by the Research Team, aligning each faculty to the school learning environment, through meetings with HODs. "We meet regularly and discuss what has been implemented by the Research Team to transfer that knowledge back into middle leaders. Then they disseminate that knowledge by working with their teams at a department level" (Principal). The main finding was that the SLT conducted meetings at four levels: whole school, faculty, Heads of Department, and Research Team, to align each faculty to the school learning environment.

The Research Team played a crucial role in the achievement of strategic goals by operating at three different levels: whole school, middle leaders, and faculty, aligning

each, either collectively or individually, to the school learning environment. The Research Team regularly presented at whole school professional learning sessions and HODs meetings. They most often discussed effective approaches to formative assessment. The key aspect of its work was the dialogue they had initiated across the School and each faculty. As a result, departments were encouraged to think more creatively about ways to design and deliver their assessment tasks. "One of the members of my department is on the Research Team. He attends their meetings, then comes to our faculty meetings and shares his professional learning with us. Our department has changed our assessment practices as a result" (HOD 3). According to this leader, the above group was operating effectively as a conduit between the SLT and HODs, as well as in its role of building the capacity of curriculum leaders and teachers to implement the AFL Framework.

Additionally, HoDs functioned as a conduit between the SLT and teachers. "Our HOD plays the role of middle-man between the Executive and our teachers" (Teacher 2). "The whole school approach is expected to feed into the department approach and then filter into individual classrooms. In my faculty we have a lot of professional dialogue about AFL strategies and then implement them in our classes" (Teacher 5). Middle leaders were expected to support the school improvement agenda and align their faculty to it. This was achieved by each faculty developing its own objectives which were aligned to the goals in the over-arching school strategic plan. These objectives were reviewed by the SLT, and once approved, actioned at a faculty level. This involved HODs working with teachers during faculty meetings to implement the AFL Framework. The pedagogical changes occurring at a faculty level, were thereby aligned to the school learning environment.

Another participant explained how through the process of whole staff meetings, smaller middle leader meetings, and then faculty meetings, followed by one-on-one meetings between HODs and their teachers, alignment to whole school strategic goals occurred. "The Principal and Deputy start a professional learning session by aligning it to a strategic goal. At HODs meetings there is further discussion and professional learning on this goal. My HOD will then discuss that at our department meeting" (Teacher 1). Middle leaders provided strong consensus that faculties were closely aligned to the school learning environment. "We've been given a direction. The research shows that it works. So now all departments are moving in that direction. We're definitely heading in the right direction" (HOD 2). "This is happening in our department and across all departments in the school" (HOD 1). Meticulous strategic planning and execution by the SLT, were aligning faculties to the school improvement agenda through a relentless process of teacher professional learning at every level of the institution.

4.6 Summary of Findings

In Case Study One the SLT, Research Team and HODs were collaborating cohesively to achieve alignment of each faculty to the school learning environment. Professional learning sessions led at a whole school and faculty level by these key stakeholders, produced a filtering effect of disseminating the reform agenda into every dimension of the School. One of the main practices of aligning each faculty to the school learning environment, was the requirement of HODs to develop a faculty plan aligned to the institutional strategic plan. Once approved, HODs were then supported by the SLT and Research Team to achieve these goals. The consensus among research participants indicated this approach was producing the desired results.

Another crucial practice in terms of alignment was the relentless focus on improving teaching. Substantial financial resources were allocated to teacher professional learning as the main strategy to enhance pedagogy. As discussed earlier, the School assigned funds from an AIS grant to facilitate this goal. Relief from face-to-face teaching to collaborate with peers and share practice in PLCs was a common process. Walkthroughs as well as teacher observation and feedback were also commonly used to build instructional capacity. A significant finding in this case study was that the alignment of each faculty to the school learning environment was effective due to the phenomenon that senior and middle leaders sustained a singular, sustained focus in professional learning meetings at all levels, on improving the classroom performance of every teacher, via the AFL Framework.

4.7 Research Question Four

What practices are implemented by school and faculty leaders to improve teacher effectiveness?

The main finding in relation to enhancing teaching practice in Case Study

One, was the provision of constant and widespread professional learning opportunities,
external and internal to the School. Internally, a smorgasbord of activities was available
to teachers at both a school and faculty level. The sheer volume and breadth of
professional learning had contributed to transforming the College into a learning
organisation where teachers were considered a community of learners.

The first step in the teacher capacity building process was to create an environment in which teachers were expected to accept responsibility for, and engage fully in, their own professional growth. "The leadership team have created a culture where teachers are not judged. They are encouraged to reflect on their practice, change their pedagogy, and develop themselves professionally. It is safe to try new things and

fail in this environment" (HOD 4). The next step was to provide time and opportunities for teachers to collaborate to improve their practice. The whole approach to professional learning was underpinned by the philosophy of building instructional capacity and agency, rather than performance managing teachers. "It is about giving them the comfort level that we are here to support them in their professional growth" (Principal). Participants indicated that teachers were responding positively to this approach by engaging to a greater or lesser extent in professional learning opportunities provided by the School, both internal and external.

As discussed earlier, most of the grant received from the AIS, was allocated to funding teacher professional learning. "The SLT have provided lots of opportunities for professional learning. They often lead them at our staff professional learning sessions. I've presented at these sessions. I've also attended lots of conferences" (Teacher 4). Another opportunity provided to teachers and funded by the School, was visiting high performing international schools. A group of teachers had visited schools in Finland prior to my fieldwork. Teacher participants spoke about the knowledge and skills they had gained from their Finnish colleagues as a result of observing them in the classroom. "There's a genuine push to share best practice beyond yourself and what you're doing in the classroom, to every teacher and classroom in the school. That's the change that I see happening now, and it's a good thing" (Teacher 5). Additionally, the Research Team was playing a crucial role in teacher professional learning by providing the latest literature on best practice pedagogy and stimulating ongoing dialogue in the School, which was providing momentum for the changes occurring in pedagogy.

Another important process implemented by the Principal to develop teachers on site, supervised by the Deputy Principal, and driven by HODs, was the 'Swivl' model.

"Swivl is a more formal system that the Principal introduced into the school to improve teaching. It works well" (Teacher 1). "So Swivl is about the teacher in the room being recorded teaching. The teacher will then view the recording and get some feedback. The teachers can go through this process more than one time" (Principal). According to respondents, this peer review mechanism was both motivating and challenging teachers to improve their practice in a systematic way. It had the added benefit of building teacher capacity in conjunction with 'Open to Learning' conversations using coaching and mentoring strategies, emanating from lesson observations.

The Deputy Principal and Director of Innovative Learning, were active in conducting lesson observations, followed by providing feedback to teachers in a candid conversation. "The Deputy Principal does walk-throughs and observes lessons as part of our professional learning. He provides feedback about the quality of teaching and learning, which is invaluable. He does that sort of mentoring regularly with teachers" (HOD 2). According to another respondent, teachers appeared to be more engaged in their growth as a result of Swivl sessions and walk-throughs. "These professional learning initiatives have been really positive in terms of supporting teachers to change their pedagogy" (HOD 1). This evolution in pedagogy from teacher-centred to student-focused lessons, as well as the emphasis by teachers on the development of skills as opposed to content, were contributing to increased student engagement in learning.

Another significant leadership practice evident in the School was providing the budget and time for structured teacher professional learning in a supportive, non-threatening environment. "There is a huge emphasis on professional learning. There is generous support from the Principal and Deputy Principal to attend externally offered professional learning such as through the AIS" (HOD 4). This strategy was contributing

significantly towards building a community of learners, and a learning organisation. The SLT was effectively promoting and leading teacher professional learning, thereby building their credibility and trust. They were also proactive in terms of encouraging teachers to engage in further study, join professional networks, attend conferences, conduct action research at the College, and publish their research. The demographic data gathered during the fieldwork revealed that 10 teachers had achieved a masters level qualification and four teachers had completed doctoral studies whilst employed at, and subsidised by, the School.

Weekly whole staff professional learning sessions was a process implemented by the Principal and managed by the SLT. These meetings were dedicated to building the instructional capacity of teachers through sharing best practice. "The siloed nature of teaching and the ability to hide in a classroom is shifting. There's a lot more transparency. That's the cultural shift that's occurring. A strategic focus on improving teaching and learning collaboratively" (Teacher 5). A major focus of professional learning sessions was upskilling teachers to effectively deliver the AFL Framework, provide meaningful feedback to students, and analyse assessment data to inform the next steps in the teaching and learning cycle. A shift in assessment practices across the School was also occurring as a result of these sessions.

Relief from face-to-face teaching to pursue individual professional learning plans, including visits to other schools, was funded by the AIS grant discussed earlier. Overall, the whole school strategy to improve teaching practice was contributing to tangible results in the classroom in terms of internal assessment data and NAPLAN results. "We haven't been doing this long enough to say, 'Yes, we've seen a huge improvement in our HSC results because our teaching has improved'. But we have seen

an improvement in internal assessment results across the school" (Principal). Having said that, the Head of Personal Development, Health, and Physical Education [PDHPE] (HOD 2), was confident the assessment for learning strategies used in his Year 12 class in the previous calendar year, produced the best HSC results achieved by students in this subject in the School's history.

4.8 Summary of Findings

In Case Study One, the SLT identified the development of effective teaching as one of the most important strategic priorities to improve learning. A number of strategies were implemented to develop pedagogical practice. In order to engage teachers in this endeavour, members of the leadership team committed themselves enthusiastically to their own professional growth. Leading by example on this front was effective in terms of mobilising teachers to follow suit. The SLT was also effective in establishing a psychologically safe (Schein, 2015) and supportive learning culture in which teachers could confidently and collaboratively build their instructional capacity.

The SLT, particularly the Deputy Principal and Director of Innovative Learning, frequently conducted walkthroughs as well as teacher observation and feedback via the Swivl model. Coaching and mentoring of less experienced teachers by more skilled colleagues were also common practices. Additionally, the SLT allocated substantial human and financial resources to facilitate teacher professional learning, including funds from an AIS grant assigned to relief from face-to-face teaching for teachers to collaboratively achieve evidence-based best practice, according to research provided by the Research Team. Funds were also provided for teachers to attend conferences and visit schools, locally and internationally. Upon returning from these events, teachers shared their new-found knowledge and skills with peers in communities of practice.

Overall, teacher professional learning in this context was highly focused and integrated because it was directed primarily to the implementation of the AFL Framework.

4.9 Conclusion

This chapter has presented the main findings from Case Study One in relation to the four major research questions guiding this thesis. In summary, the Principal and SLT simultaneously implemented a range of instructional and transformational leadership practices in an integrated and distributed way to successfully develop the school learning environment and improve teaching. This finding is consistent with the main theoretical assumption underpinning this thesis. The most salient finding, however, was the coherence of the reform agenda and the cohesion created to accomplish it. The leaders in this context, under the influence of the Head, were able to set a clear, integrated direction and effectively align stakeholders to it.

The next chapter will present the main findings from Case Study Two, following the same structure as this one.

Chapter 5 - Know your school context and how it works

5.0 Introduction

This chapter presents the main findings from Case Study Two according to the themes that emerged from the data. Hence, it has the same structure as the preceding chapter. Strategic school improvement at this institution included changing the educational direction of the School, sharing leadership of the internal reform agenda, and developing a school wide, fit-for-purpose pedagogical framework to drive change.

The main elements of improvement at this site were the leadership skill and discernment demonstrated by the Principal and other leaders in leading change in an academically high performing school, in response to contextual priorities and challenges. The approach to setting a new direction for the School was driven by the Principal's educational philosophy. This consisted of a two-pronged strategy of enhancing student and teacher agency. On the one hand, it involved shifting student attitudes to learning whilst simultaneously empowering them to be more self-directed and resilient learners. On the other, it consisted of concurrently building teacher instructional capacity to facilitate the transformation of learning. In doing so, the leaders in this context, demonstrated how to effectively engage stakeholders and manage negative group dynamics (Chew & Andrews, 2010), where and when resistance to change emerged.

The main contribution of Case Study Two to this thesis is in demonstrating the precise nature of the relationship between context and leadership (Bascia, 2014; Burak, 2018). In particular, this chapter explains why and how context matters through an exploration of the customisation of leadership practices and related processes, to a specific context.

5.1 Research Question One

What practices are implemented by school leaders to improve the school learning environment?

The practices implemented by the Principal and other leaders to improve the school learning environment, and the processes they consist of, are presented below as sub-headings according to the five major themes that emerged from the data, common to all four case studies.

5.1.1 Establishing a school improvement agenda

The current Principal was appointed by the Board of Directors in 2014, with a mandate to maintain the academic performance of the College as one of the highest achieving non-selective schools in NSW. Her first and most pressing priority was 'direction setting'. The educational vision she articulated was to change direction in terms of a focus on preparing students for life in the 21st century, beyond their compulsory years of education. This blueprint primarily involved an emphasis on the intrinsic value of the learning process rather than the product, measured usually by assessment results, particularly the ATAR. This represented a watershed moment in the history of the College. After a century and a quarter of highly successful education, the Head of School, only the ninth in the institution, was changing tack, albeit on an evolutionary rather than revolutionary scale.

The genesis of the Principal's vision was her adverse assessment of the HSC due to its formulaic nature and systemic failure to instil in students a passion for lifelong education. "The problem for me educationally, is that the HSC in its current form, is all about going through the hoops and getting the marks. It's not about facilitating a love of learning and developing skills for life after school" (Principal). She was equally disparaging of a politically driven, federally led reform agenda aimed at lifting the

performance of Australian students in international tests such as PISA and TIMMS. As a result of this critique, the viable alternative she offered was internally focused reform to meet the needs of students in her school, as opposed to an externally driven testing regime pre-occupied with ranking students, their institution, and country.

The Principal's vision consisted of a transformative holistic education intended to inspire in students a love of lifelong learning. The aim was that this would lead to intrinsic motivation and the creation of self-directed, self-disciplined learners. "We don't want students thinking, 'What do I need to do to pass the test?'. I want to promote 21st century learning and prepare them for lifelong learning, not just for the HSC and tertiary education" (Principal). Developing new attitudes to learning as well as skills such as independent and critical thinking, was expected to encourage students to take academic risks and be agile learners, preparing them effectively to meet the challenges they would face in life.

A clear consensus existed in the school with regard to the educational direction of the institution. "Historically, we've had a results focus. So, students got good results. The new approach is for students to develop a love of learning. To develop skills that will prepare them for life after school in the twenty first century" (HOD 4). In fact, all curriculum leaders who participated in interviews, were in agreement on this new direction. "We're shifting the emphasis away from HSC marks and ATARs. We're moving away from the product and toward the learning process. We're adopting an approach to learning focused on taking risks and empowering students to be masters of their own learning" (HOD 3).

Whilst the School had historically achieved extraordinarily high HSC results, the strong accord among educators in this context was that it was too narrowly focused on

external testing and exit credentials. A significant finding in Case Study Two was the courageous leadership on the part of the Head of School. Inspired by her strong beliefs and passion for girls education, she took the decision to depart from the historical direction of the School, when the easier course of action would have been to take the path of least resistance and continue in the footsteps of her eight predecessors.

The Principal's vision had clearly filtered down to middle leaders. "Anyone in the school can tell you what the push is in terms of the type of learning we want here" (HOD 1). Another curriculum leader added, "It's definitely the Principal's vision. Looking to improve the way we teach and learn. Embracing digital technology to improve learning. So, students are getting the sense that the school is thinking and innovating and moving learning forward" (HOD 2). The Principal's educational philosophy had also permeated the ranks of teachers. "The Principal is driving the agenda about students accepting that learning is a journey. It is about the process rather than the product. That's the big cultural shift that's occurring in the School. It's definitely happening in our department" (Teacher 3). "The Principal has a strong focus on the value of learning, not to pass the test or get a high ATAR. Learning for the love of it. For its intrinsic value. To enjoy the learning process and achieve their best" (Teacher 1). A filtering process of the Principal's vision cascading to middle leaders and then teachers, had transpired in this context. The Head of School set a new direction which cascaded into every level of the organisation. The importance of the strategic plan in distilling this vision is elaborated upon in the next two paragraphs.

Middle leaders explained the process followed by the Principal to align stakeholders to her vision. "Every member of staff was consulted about learning in the school. She has worked with teachers, parents and the wider community in terms of

communicating the vision. We're looking at where we can improve learning and move forward" (HOD 1). The Principal's educational philosophy was embedded, with the endorsement of the College Board, in the strategic plan, following a process of consultation led by her. The Heads of School sought validation for her reform agenda from the Board. Once gained, she proceeded with confidence to give it weight by enshrining it in the strategic plan. By the authority vested in that document, the bearer of it was able to influence their stakeholders to a lesser or greater extent.

Teachers were also able to shed light on how the Principal secured support from the community for her vision. "She started by articulating the values of the school. She involved students and staff in that process of communicating what's important in terms of learning. Following that process of consultation, our learning priorities are stated in the strategic plan" (Teacher 3). The Head of School had first secured the support of the Board for her vision and then aligned stakeholders to the plan. The challenge for her and the leadership team, was to successfully change the educational direction of a school that had reached a high level of maturity in its improvement journey, measured by academic performance.

A second strategic priority forming the Principal's educational vision was improving the well-being of students, which she considered integral to learning. "Pastoral care is really important in the context of high expectations of parents and teachers, and the girls themselves. So, we're trying to develop resilience in students and bust the fear of failure. But that's going to take some time" (Principal).

In terms of the process of enhancing the well-being of students, the first step was a review of the student welfare program led by a steering committee consisting of the Deputy Principal, Year Coordinators, Counsellors and a random sample of students

representing each year group. The second was to survey all students on questions such as, *When do you learn best? What prevents you from learning?*, and so on. The data gathered from the survey led to insights about the need to develop social and emotional skills in students in order for them to cope with the demands of learning in a high performing school (HOD 2). Another mechanism was to introduce inter-disciplinary work in Stage 4. Teachers in Year 7 and 8 implemented a Science, Technology, Engineering. Arts, and Mathematics [STEAM] project and reinforced the message that failure was an acceptable dimension of learning (HOD 3). Students in these year groups were reportedly more accepting of the message due to the lower stakes at this particular stage of the curriculum, compared to the senior school.

An important component in the process of developing resilience and positive attitudes to learning in the student body was staff professional development sessions on implementing models such as the *Resilience Doughnut* and Carol Deck's *Growth Mindset*. These programs were then delivered via tutor groups within a year cohort. The aim of the programs was to develop in students valuable non-cognitive outcomes such as resilience, perseverance, informed decision making and self-efficacy (Teacher 3). The implementation of these programs was supported by Counsellors who provided teachers with proactive strategies to work with the student body to alleviate stress and anxiety, build resilience, and develop empathy for other students (Teacher 2). A frank evaluation of the success of this strategic priority was provided by one participant. "Are we there yet? Not quite. But we're on our way. We're making progress. I'm very excited about that" (Teacher 1). The review of existing, and implementation of new, well-being programs was ultimately aimed at improving student capacity to learn effectively.

Participants candidly expressed the view that the goal had been partially accomplished

at the time of this fieldwork. In their responses, the expression 'work in progress' was uttered on many occasions, demonstrating recognition of the merits of the plan, particularly the value of the process, but also that realistically it would take more time to reach fruition.

5.1.2 Embedding a learning culture in the school

The learning culture was described by participants as vibrant, where students were highly motivated to learn and applied themselves consistently, with senior students acting as effective role models to their junior peers. "The values and culture of the school propel students in their learning. The girls are keen to succeed. The teachers are keen for students to succeed. There's a deep-seated culture of academic rigour that has developed over 130 years" (Principal). "The culture here is that students will aim to do their best. There are high expectations from the school and wider community.

Parents expect it. The girls expect it. The teachers feel the pressure to maintain those high academic standards" (HOD 1). The nexus between the strong learning culture and high stakeholder expectations was commented on by most participants. Similarly, several spoke openly about the detrimental impact of extremely high academic expectations on the mental health of students. The objective of improving the well-being of students was a direct consequence of the epidemic of anxiety and depression afflicting students as a result of the pressure to perform well.

Despite the historically high academic performance of students, the Principal was not prepared to rest on her laurels. She was intent on leading the School in a different educational direction. "The learning culture is part of the school's DNA. But the Principal has set the tone. She says openly that we are doing great things, but we need to strive to keep improving. There is always room for improvement" (HOD 2). "The

current Principal is moving the emphasis away from results" (Teacher 4). She was achieving this strategic goal by focusing on the incredible learning opportunities offered at the School and encouraging students to avail themselves of them, for the joy of learning. An additional layer in the process was creating a culture where students are valued for who they are, rather than what they achieve. Teachers were promoting this message in class, via parent/teacher interviews, and in semester reports.

5.1.3 Leading teaching and learning

Instructional leadership, manifest in changing the educational direction of the School, would rely on the anticipated momentum provided by the implementation of a fit-for-purpose learning framework, which was in its development phase at the time this research was undertaken. "We're embarking on developing a learning framework specific to this school. We're doing the research that underpins that framework. We've got a few months to finalise and refine it, then launch it to the staff in Term 1" (Principal). The goal of the framework was to develop higher order skills such as critical thinking, problem solving, and creativity. Students in this environment had an enviable combination of considerable natural ability, and a strong work ethic developed through the culture of the institution. However, rote learning was the modus operandi of the vast majority. The challenge, therefore, was to develop in students the capacity to think independently and critically.

The Head of School explained the processes inherent in creating the learning framework. The Director of Research and Innovative Learning was handed the responsibility of leading an inter-disciplinary steering committee in the development and implementation of the framework. The first port of call for this group was to consult HODs on how their faculty catered for 'high potential' (Gifted & Talented) learners as

well as students requiring additional support. The second step was to gather and examine the research on best practice pedagogy with regard to differentiating the curriculum. Two renowned models explored in this context were the *Carol Tomlinson Model* and *Maker Model*. The next stage involved developing a framework contextualised to meet the needs of students. This draft was then presented to each faculty. The feedback received from all departments was acted upon to revise the prototype, which was then presented to all teachers at a school level staff meeting.

At the time of this fieldwork, the framework was undergoing a final re-iteration prior to its official launch to the College community. This represents a significant finding in terms of bringing to light the processes that are implemented by leaders to achieve their strategic goals. The Principal made a leadership decision to create a learning framework to transform the way students learn. This resolution led to a series of events just explained, which brought it to fruition. As will be discussed in Chapter 8, the School Effectiveness and School Improvement literature is almost devoid of discussion of processes such as this in its exploration of how leaders improve the school learning environment and teaching.

5.1.4 Leading change

The Head of School had embarked on an internally driven reform agenda, which she described this way: "We're on a dual trajectory to sustain high academic achievement along with a love of learning. At the same time, we're trying to reduce high levels of stress and anxiety in the student body caused by overwhelming community expectations" (Principal). The progress in this strategic goal was acknowledged by participants. "The learning environment here is changing, for the better. I feel that the change occurring under the new Principal is that the school is looking to develop

students holistically rather than focusing only on achieving high HSC results" (Teacher 5). Striking a delicate balance as outlined above was going to take both skilful manoeuvring and courage on the part of the leadership team, which will be explored in subsequent sections.

The Head of School was asked about the extent to which context informed her leadership of change. "It's huge. You have to take a good look at your school context before you do anything. I know the school and how it works. It's really complex. So, context, particularly the culture of the school, is critical. You've got to make changes really carefully" (Principal). An intimate understanding of her context led to incremental change as evident in the following example. "In my first year as Principal, I intentionally did not bring in any change that would upset Year 12 students or their parents or their teachers. I just maintained the status quo for that group. After they left, I was able to do a lot more" (Principal). In the interests of continuity and stability, no change impacting the HSC cohort was introduced in the maiden year of her appointment. This finely-honed leadership skill of knowing one's context and responding accordingly, emanated from careful scanning of the environment and everyone in it, combined with discerning when to act and when not to. The insight to know the context and lead accordingly, was an important factor in the effective reforms initiated by the Principal. As will be discussed in Chapter 8, this phenomenon of context specificity or lack thereof, explains why so many externally driven reform efforts ultimately falter or fail completely.

The Principal acknowledged that implementing change in a historically high performing school had met with some opposition. She was aware that some long-standing members of staff were of the view, "If it ain't broke, don't fix it" (Principal).

Middle leaders also recognised that they were leading learning in a time of cultural change in the School and some resistance from the old guard was manifest in closed departments and classrooms. "The perception is why change a successful formula. We don't readily jump onto bandwagons and that's a good thing. But that also means that we are generally slow to change, and that's not such a good thing" (HOD 3). In this case study, leaders demonstrated that they were skilled in managing negative group dynamics (Chew & Andrews, 2010). They understood the dynamics in that context and prudently followed a gradual process of resolving the tension between the love of learning and pursuit of HSC success at all costs.

5.1.5 Distributing leadership

Given the workload of the Principal due to her administrative duties, the reform agenda was driven by a steering committee consisting of the Head of School, Deputy Principal, Director of Curriculum, Director of Research and Innovative Learning, and HODs, in keeping with a distributed or shared leadership for learning model. "We're driving it together. When I say we, the direction came from me, but the work on the ground is being done by the Deputy and the Directors, in collaboration with the HODs" (Principal). The Head of School retained overall strategic accountability to the College Board, whilst delegating operational responsibility to the SLT and HODs, confirming the finding that the heroic leader model (Drysdale, Bennett, Murakami, Johansson & Gurr, 2014) was not in operation at this institution.

According to the Principal, her Deputy's main responsibilities included the daily operation of the school and management of students. This approach was corroborated by participants. "The Principal drives the big picture in terms of the learning environment and pedagogy. The Deputy is supporting the Principal's vision behind the

scenes. She is more involved with logistics, organising the calendar and timetable. and student well-being" (HOD 2). "The Deputy Principal organises all the professional development around student well-being, stress, anxiety, resilience, and counselling" (Teacher 2). This delegation of authority according to the passion and expertise of members of the leadership team, was commonly acknowledged by interviewees. Its added benefit was that teachers knew exactly which member of the team to approach to discuss a particular issue. For instance, all matters relating to student well-being were addressed to the Deputy Principal.

The division of responsibility extended to all members of the SLT. The Director of Curriculum had more of a compliance role, focusing on NESA registration and accreditation requirements, and curriculum administration (Teacher 4). The Director of Research and Innovative Learning had designated responsibility for staff professional learning. "She facilitates the professional learning of staff at school level. She organises staff development days with sessions such as project-based learning, the Maker Model and differentiation of the curriculum, STEAM based units of work, and creative and imaginative thinking" (HOD 1). The Director of Research and Innovative Learning was also tasked with guiding curriculum leaders in aligning their faculty to the educational direction of the School. "She is very hands on in terms of working with HODs and teachers to develop their pedagogy" (HOD 2). The process followed in developing staff was to organise guest speakers to deliver various sessions to staff. This would then be followed by ongoing workshops with each of the departments, run by the Director. HODs would then be required to work with groups or individual teachers within their own faculty to improve teaching and learning.

Again, this is a significant finding with regard to the processes underpinning distributed leadership. The review of school leadership literature in Chapter 2 emphasised that this model of leadership is discussed in the absence of references to how it operates on a practical level in schools. In contrast, Case Study Two demonstrated how distributed or shared leadership for learning functioned effectively at an operational level in institution.

5.2 Summary of Findings

Case Study Two had an enviable track record of outstanding academic achievement for over a century. Not content to rest on her laurels, the Principal implemented a school improvement agenda underpinned by a strategic plan endorsed by the Board. She described her vision as a dual trajectory of instilling in students a lifelong love of learning for its intrinsic value, and simultaneously enhancing their wellbeing, in a two-pronged approach to holistic education. In pursuing this agenda, the Principal demonstrated courageous leadership, aware that there would be some opposition to her plan. One of the main findings was her intimate knowledge of context and how that informed the internal reform agenda. Prior to her appointment as Head of School, she had been the Deputy Principal in the same institution, left to gain experience elsewhere, and returned as Principal. Over a decade of service in the same organisation, had provided valuable insights into how to lead that community.

Another significant finding was her skill in engaging stakeholders. Her extensive consultation process, contributed to substantial teacher ownership of the reforms, reducing the type of resistance to change which is well documented in the leadership literature (Kotter, 2012). The Principal was physically diminutive and softly spoken, the

antithesis of the heroic leader. Yet, she was able to take the road less travelled and lead effectively based on strategic practices informed by context.

Other significant findings in relation to effective leadership practices include shared leadership for learning, creation of new staff positions, establishment of a steering committee, and building a culture that facilitated reform rather than work against it. At this site, the Deputy led student well-being programs, which was invaluable to the Principal in progressing her agenda. The Director of Research and Innovative Learning was working alongside HODs and teachers to improve pedagogy. Significantly, the development of a fit-for-purpose framework focused the mind and energy of teachers on a single apparatus to improve teaching and learning. The creation of this framework in a PLC contributed to strengthening the learning culture of the organisation and most teachers taking ownership of the reform agenda.

Finally, the findings from Case Study Two also confirm the main theoretical assumption underpinning this thesis. The Principal and other leaders in this context, simultaneously implemented a range of instructional and transformational practices in an integrated and distributed way to develop the school learning environment to improve teaching and learning.

5.3 Research Question Two

What practices are implemented by faculty leaders to improve the faculty learning environment?

In this context, the formal faculty leadership team consisted of the HOD and an Assistant Head. The latter was appointed according to a formula based on the size of the student population, and hence the number of teachers in the faculty, a standard practice in large independent schools. This role facilitated shared leadership for learning at department level. Less formally, senior teachers contributed to faculty leadership.

5.3.1 Developing effective teaching

Shifting the learning culture of the School was established as the Principal's main strategic priority. To this end, she expected HODs to align their faculty to the school learning environment. As a result, curriculum leaders had articulated to their team a transparent agenda to improve the faculty learning environment, focusing on achieving best practice pedagogy (HOD 1). Middle leaders created or enhanced a faculty culture conducive to supporting communities of learning using different processes. "Change was more readily accepted in my department. I've led it for a long time in a very open way, where everybody had a say. I would listen to all their comments and eventually I would make a decision" (HOD 3). The approach of this middle leader was to foster democratic governance which gave teachers a voice and empowered them to take ownership of the agenda.

Another curriculum leader sought to build trust and positive relationships among teachers to develop a safe, non-threatening environment in which to collaboratively improve practice. "We have lots of meetings and discussion about pedagogy. We give teachers ideas and resources to implement best practice in the classroom. And of course, support to achieve best practice" (HOD 4). The leadership style of these HODs was consistent with the consultative approach modelled by the Principal. It emerged during participant interviews that this leadership model was contributing to greater results at a school and faculty level, in contrast to the long line of authoritarian leaders in the history of the College. Teachers were reportedly more engaged and motivated in the current democratic regime.

Another finding that emerged was a high level of collaboration at a faculty level, sharing of resources and professional practice, as well as mentoring of less experienced

teachers by their senior colleagues. "I wrote programs for units of work last year, under her [HOD] supervision, and then we tweaked them this year. So, that's one example of effective collaboration" (Teacher 5). According to this teacher, extensive teamwork in her faculty consisted of sharing of resources and ideas at a faculty level, as well as in small groups such as a course or year level, particularly in relation to reviewing and revising curriculum. "We are a cooperative bunch. The teaching staff are pretty amazing in that there's that willingness to go the extra mile in enabling students to achieve as much as they can" (Teacher 4). One participant acknowledged that she was fortunate to be part of a dynamic department which was striving constantly to innovate and make the study of Languages engaging for students. "In our department, there is a lot of sharing of ideas and resources. There's a lot of dialogue. People talking about what they are doing in the classroom and how that's going. Happy to share lesson ideas and assist their colleagues wherever they can" (Teacher 2). Other teachers, but not all, also noted that the norm in their faculty was ongoing informal dialogue about improving pedagogy, sharing physical resources, and exchanging teaching and learning strategies.

Seeking guidance from colleagues, particularly senior teachers, was especially valued by a less experienced practitioner. "We seek advice from our colleagues which I really like. There's a lot of conversation and sharing of ideas, and resources, and teaching strategies" (Teacher 1). Mentoring of junior teachers, particularly NSTs through a process of meeting before lessons, jointly planning the lesson, team-teaching, observing lessons and providing feedback, was acknowledged as custom and practice in this faculty. "The NST in our faculty has a mentor teacher who does quite a bit of planning with her before lessons. Then there's the lesson observation and the meeting after the lesson to provide feedback" (HOD 2). This approach served to build the

instructional capacity of the least experienced teachers in the department. The collective ownership of this agenda was also de rigueur in the faculty.

Another finding in the College was the strong commitment to the professional learning of teachers. A common practice in faculties was to use a suite of professional learning strategies, both external to the school, and internal, to develop best practice pedagogy. One curriculum leader outlined her approach to developing effective teaching. "In our department, it's not a one-size-fits-all approach to professional learning. To be meaningful, it needs to be where teachers are at and add something new to their repertoire" (HOD 2). She elaborated that her teachers were members of the History Teachers Association of NSW, which gave them unlimited access to courses and conferences, as well as literature published by this professional body. A participant from another department (Teacher 5) confirmed that encouragement to attend externally delivered professional development events was a feature of her faculty. In addition, her HOD encouraged teachers to undertake post-graduate study, conduct action research and publish their findings. A generous budget was allocated to supporting the development of effective teaching and agency in this context.

The cornerstone of ongoing, site-based professional learning was formal faculty meetings combined with informal dialogue among teachers. According to one participant, time at these meetings was allocated to teachers sharing their learning from professional development events attended externally (Teacher 2). In another faculty, discussion at a whole department level focused on how to improve practice through pedagogical models such as project-based learning and flipped classroom (HOD 4). It was common practice in faculties for teachers to present on effective teaching and learning strategies they utilised in their classes (HOD 2). Reviewing current practice,

supporting innovation in pedagogy, and improving teacher feedback to students, were frequent topics of discussion.

Trawling the literature for evidence-based best practice pedagogy, exploring inter-disciplinary approaches to teaching and learning, integrating digital technology into the classroom, and using a broad repertoire of formative assessment tasks, were also regularly examined and integrated into teaching practice (HOD 4). "At the moment the focus is on implementing a new Stage 6 syllabus for Year 11 next year. All the Year 11 teachers, led by the HOD, have been working on getting programs ready for delivery" (Teacher 4). In the current climate of curriculum review and implementation of new syllabuses in NSW, the focus away from formal faculty gatherings, consisted of an informal collaborative process of meeting, discussing the syllabus, gathering resources, writing scope and sequence documents, and developing programs and assessment tasks, which collectively contributed to building the instructional capacity of teachers. The processes described above are also significant in terms of demonstrating how middle leaders developed teachers in their faculty. These HOD leadership practices and processes fill a void in the school effectiveness and improvement literature, a further contribution this study makes to gaps in the field.

Whilst many, if not all participants, described the positive practices and processes implemented in faculties to develop effective teaching, several candidly acknowledged the challenges and obstacles associated with achieving this strategic goal. Resistance to change, especially from the old guard, occasionally leading to conflict, was identified as the main roadblock. "It was a battle of wills, but I stuck to my guns" (HOD 2). Confrontation was most prevalent in this faculty where the leader was appointed to the role with a mandate to change the culture of the department. Fierce opposition to

her change agenda occurred in terms of defiant and even bullying behaviour. She was ultimately successful due to her resolve, in the absence of a lack of practical support from the SLT. "Fast forward to now. Everyone's heading in the right direction. We have a shared vision. We collaborate. We share resources and ideas. We enjoy each other's company" (HOD 2). According to this middle leader, the power balance in the faculty eventually shifted with natural attrition when entrenched older teachers were replaced by younger colleagues who embraced the vision for change.

One teacher acknowledged the presence of conflict in her department. She attributed the tension to a clash of personalities between the HOD and a teacher colleague who was tethered to the past and unwilling to embrace the new vision of creating an engaging curriculum, with a view to preparing students for the future. "Things are changing. Big things are changing. I think that's the main cause of the conflict. In my view, the changes are excellent. They've needed to happen for some time now, and the HOD is the right person to take us in that new direction" (Teacher 5). This teacher also recognised that her faculty leader is working through a process to resolve the conflict, not allowing the source of the tension to stop the department from moving in the direction the School is taking. She added that the HOD had the full support of the SLT, another sign of the changing times and culture.

5.3.2 Allocating resources to support teaching and learning

Any visitor to this campus would be struck by the learning environment in terms of the impressive physical grounds, the great facilities and learning spaces, especially for practical subjects such as Creative and Performing Arts [CAPA], as well as the incredible investment in technology. One participant described it in this way. "We are so well supported in technology. Desktops, laptops, interactive whiteboards in every

classroom, wi-fi access across the campus. You name it we've got it. Not just the infrastructure but also the helpdesk. Two people on all day during school hours to assist teachers and students" (Teacher 1). Another teacher outlined the systems in place to support teaching and learning. "The learning resources and activities we do in class are uploaded to Microsoft OneNote so students can access them anytime from their laptops. They can post questions or solutions and then email their teachers or peers and let them know. So, this system has been invaluable in terms of engaging students in learning" (HOD 1). A significant financial investment in the learning environment had been undertaken over a substantial period of time to achieve this level of sophistication.

The considerable financial resources available to the School enabled the allocation of funds to boost human resources to facilitate learning, as in the case of technological support. Additionally, the Principal created the position of Director of Research and Innovative Learning in order to bring her vision to fruition. Fiscal resources were also directed to extra learning support for students with additional needs. For example, all classes from Year 7-10 were graded, with a maximum of 10 students in the lowest ability class. A teacher's aide or second teacher was allocated to this class. "The students really progress because of the class sizes and the additional learning support" (Teacher 2). At the opposite end of the spectrum, flexible progression was offered for the most capable students to move through the curriculum according to ability rather than age. Timetable structures facilitated this progression, requiring additional staffing to support small classes of accelerated students. Overall, substantial resources were allocated to support teaching and learning. No expense was spared in this regard.

5.3.3 Developing positive attitudes to learning in students

Middle leaders were highly committed to aligning their faculty to the school learning environment by developing in students positive attitudes to learning. This alignment was characterised by a subject specific approach rather than a generic strategy. Achieving one's full learning potential was promoted by the Mathematics Faculty who encouraged students to strive to study at the highest level appropriate to their ability. All teachers delivered this message constantly in their respective classes and at parent/teacher interviews. Teachers then supported students to do their best at the level selected (HOD 1). Another department had a different emphasis. "From Year 7, we emphasise the love of learning. We want our students to love History after they leave school. So, we take the emphasis away from assessments and marks, so students love the topics, the learning process, and the skills they are developing" (HOD 2). In the History department, the level of academic achievement was less important than developing a passion for the discipline.

The CAPA Faculty took a similar tack by replacing summative assessment, in the form of examinations, with formative assessment in Year 7-9. In addition, they implemented assessment for learning principles from Year 7-12. This led to a transformation in the way students approached learning. "That makes a big difference in attitude to learning. Students enjoy the learning process because it develops skills like critical thinking and creativity, not rote learning and regurgitation of content" (HOD 3). This middle leader then outlined the processes undertaken to shape student attitudes to learning. In Music, students in Year 7-9 are not given a mark in assessment tasks. They receive only feedback to reinforce the message that teachers value the learning process rather than the product. Another process involved students in Year 10-

12 receiving a digital video disk [DVD] recording of their practical performance. They then assessed their own performance according to the assessment criteria. Next, they received teacher feedback and an accompanying mark. "I found that in 90% of cases, student self-assessment was accurate" (HOD 3). These strategies were reportedly effective in reinforcing the importance of the learning process above the numerical product. Significantly, they also emphasised how each faculty was aligned by the HOD and their team to the school learning environment.

Another process in the CAPA department, was to cease distribution of assessment schedules in the first week of term. This emphasised the message about engagement in the learning process as being the ultimate goal of learning. The HOD acknowledged that these approaches needed to occur in every subject for the love of learning to be embedded across the curriculum. An alternative point of view was provided by another curriculum leader who was equally passionate about learning for its own sake. "Extrinsic rewards rob students of learning for its intrinsic value" (HOD 4). She noted that school assemblies were filled with presentation of awards and certificates for high achievement. She was of the view that the underlying message in rewarding only the top performers was counter-productive to achieving the vision of a love of learning. Her recommendation was to only acknowledge application to study at assemblies to recognise the value of academic effort.

5.3.4 Managing student attendance and behaviour

Student attendance at the College according to its MySchool website was 95%.

Student behaviour was reportedly such that there was no distraction from inappropriate conduct to either teaching and learning, or significant time on task during lessons (HOD 1). "There are no classroom management issues or time wasted because

of discipline problems. That means the amount of time teachers spend on instruction, and the time students spend on learning, is massive" (Teacher 2). "The students are incredible. We really have no issues with discipline. That allows the classroom to be a place of freedom and creativity for teaching and learning" (Teacher 5). However, high stakeholder expectations and the overwhelming pressure to perform at the optimum level academically had a debilitating impact on the mental health of many students. As discussed previously, this led to the delivery of a suite of well-being programs to build academic resilience, as well as manage student anxiety and depression related to assessment, which were identified as significant issues, particularly as students progressed through high school.

5.3.5 Engaging parents in the learning agenda

Parental expectations had been historically high for a number of reasons, as identified by the Head of School and middle leaders. "They want their girls to succeed. They send them here because it is a great school. It gets good academic results" (Principal). "This is the school of choice for parents who want academic excellence for their daughters. So, their expectations are pretty high" (HOD 4). However, there was acknowledgement from some participants that the College needed to do more to engage parents in dialogue about the new educational direction the School was embarking upon. "I think it's really important to show the community the value of what we do in the classroom" (Principal). The intention to engage parents further was expected to be undertaken via various avenues as identified by interviewees. "So, at some point the parents need to be brought more into the conversation" (HOD 3). "It's an area where we could do more, get parents involved in the life of the school" (Teacher 2). Another observed that there was a need for greater parent and community consultation through

satisfaction surveys for parents (Teacher 4). The last word on the matter goes to this participant who was positive that the School would succeed in this challenge. "I am optimistic. There's a lot better communication and consultation at this point in time. Quite a different style (from the previous regime) which is good to see" (Teacher 4). Two points are noteworthy in this context. First, the College was scheduled to review its reporting system, to be led by the Deputy Principal and the Director of Curriculum. Second, it was noted that Year 12 students and their parents were surveyed just prior to graduation, regarding their experience of their final year of schooling, particularly learning. These points emphasised the willingness on the part of the new regime, to consult and meaningfully engage its main stakeholders, an approach that was new to the School and one which would take some time to embed in its culture.

5.4 Summary of Findings

A significant finding in Case Study Two was its break from the past in terms of a democratic style of leadership that engaged and motivated teachers to develop their practice and work towards changing the learning culture of the School. Practices to improve and align each faculty to the school learning environment included collaborating with colleagues to share resources and best practice pedagogy in PLCs. Another finding was the practice of mentoring teachers new to the profession, by more experienced staff. More importantly, ownership of building instructional capacity was accepted as a whole faculty responsibility, not exclusive to the SLT. A generous budget was available to support teacher professional learning through various avenues, internal and external. An important aspect of developing both teachers and an engaging curriculum, was a heavy investment in the physical learning environment, including IT.

Despite the many advances in leadership style, faculty culture and building teacher efficacy, reform was not all smooth sailing. Instances of resisting change came to light during participant interviews. To their credit, faculty leaders with 'blockers' in their team, persevered with their reform agenda until they achieved a tipping point of a critical mass of teachers who were supportive of change. In the current environment, teachers who participated in interviews disclosed that they welcomed the new vision for learning, particularly the emphasis on the process rather than the product. They were also supportive of the introduction of student well-being programs to build academic resilience and alleviate assessment related stress and anxiety.

The parent engagement strategy, on the other hand, was identified as an area of improvement. Traditional mechanisms were used to communicate to parents.

Fortnightly newsletters informed them about events in the School. Parent/teacher meetings were conducted each semester to provide feedback on the progress of students. Also, parent satisfaction surveys were administered annually to gauge approval of the institution's performance. However, a shortcoming was that parents were not actively engaged in dialogue about the curriculum and learning, or addressing the mental health issues of students. A genuine partnership with parents was an aspirational goal the School was committed to achieving. This was one area that lagged in an otherwise effective repertoire of leadership practices and processes implemented to improve the faculty learning environment and enhance teaching practice.

5.5 Research Question Three

What practices are implemented by school and faculty leaders to align the faculty learning environment to the school learning environment?

A significant finding in Case Study Two was that HODs and their Assistant were crucial in leading the process of aligning each faculty to the overall direction of the

School. Their practices and the processes they consist of, are discussed below in relation to six academic disciplines – Mathematics, History, Creative and Performing Arts, English, Religious Studies, and Languages.

The Head of Mathematics was quite explicit in articulating the educational direction of the faculty. "The over-riding philosophy in the school, re-iterated in the Mathematics Faculty, is to empower students to be lifelong learners. We're looking at acknowledging, not just excellence, but also application and constant effort. This represents a shift to rewarding learning for its intrinsic value" (HOD 1). This view was re-iterated by a colleague in the department. "The Mathematics Faculty is empowering students to achieve their best, but above all else, enjoy the learning process, and embrace the joy of learning" (Teacher 1). In collectively pursuing this strategic goal, the HOD provided constant encouragement to her staff to embrace the vision of the Principal. Support to pursue this goal was facilitated by the allocation of time at department meetings to teachers presenting to their peers about effective strategies in developing a love of learning in students. This passion was instilled through a process of consistent encouragement for students to study the discipline at an appropriately challenging level, take control of their learning, and drive it where they wanted it to go.

Other curriculum leaders implemented various processes to align their faculty to the overall vision of the School. The Head of History worked with her teachers on staff development days and at faculty meetings to implement the curriculum in such a way as to "create that love of learning and develop 21st century learners" (HOD 2). According to the Head of CAPA, the vision was readily accepted in her faculty through a democratic process where teachers were duly consulted and engaged. The consensus was that her staff had always promoted a passion for the subject, so a natural alignment to the new

educational direction of the School occurred organically. However, she acknowledged that siloes existed in other departments. "That's where the cultural shift can be challenging. Some staffrooms and classrooms can be very closed. There are resistors out there" (HOD 3). The challenge was to embed the new vision across the School by aligning all teachers and departments to it.

The Head of English took a less organic and more measured approach to securing the engagement of her teachers. She followed a process of ongoing dialogue to achieve coherence and understanding of why change was occurring. Once she established the rationale for change in her faculty, she set expectations of her teachers and supported them to change their practice through continuing professional learning. One such shift in practice was to negotiate the curriculum with students. "We give students the scope to choose topics and areas of interest to them within the parameters of the curriculum. There's room for choice, particularly in Year 7-10 where the syllabus is less prescriptive and there's less standardisation of assessment tasks" (HOD 4). She and her staff also engaged in a process of changing the mindset of their students to adopt a passion for learning. In this stage of the curriculum, characterised by fewer constraints, academic risk taking, independent thinking, and self-efficacy, were reportedly more easily developed in students.

Similarly, the Religious Studies Faculty had created a safe learning environment where it is acceptable to fail, which contributed to instilling in students a love of learning (Teacher 5). "I find it exciting to know where we are going. We have a direction and purpose, so that's helpful. It sits really well with the school learning culture. Everyone in the department is passionate about learning. So, we try to make our lessons as relevant as possible for the students" (Teacher 3).

The English Faculty was following a similar path in terms of preparing students for life after school by developing critical and creative thinking skills, as well as promoting achieving one's personal best rather than being marks driven (Teacher 4). The Languages Faculty was also pursuing a strategy of engaging students by making learning relevant to the life of students, as well as focusing on the process of learning rather than the product exclusively.

5.6 Summary of Findings

Alignment of each faculty to the school improvement agenda was driven by HODs and their Assistant in accordance with the responsibility placed upon them by the Principal. The faculty leadership team was required to secure teacher engagement in terms of implementing the goals in the strategic plan. The practices and processes of aligning each department to the school learning environment were determined to a large extent by the style of leadership of the HOD and the dynamics in the faculty. Dialogue at department meetings was an important process in achieving this aim. Explaining the rationale for change was also reportedly significant in this regard. Faculty consultation in curriculum design achieved the outcome of teacher ownership of the agenda. Additionally, HODs also delivered ongoing professional learning for teachers where they shared strategies to engage students in a love of learning. The requirement for teachers to change tack in the classroom was thereby supported in a very practical way. Another common practice across faculties was the celebration of student application to study to reinforce the value placed on effort in the learning process. Despite the progress being made on this front, there was the acknowledgement that some resistance existed in relation to moving with the times.

5.7 Research Question Four

What practices are implemented by school and faculty leaders to improve teacher effectiveness?

The multi-level practices implemented by school leaders to build instructional capacity and the processes they consist of, are explored in this section. As discussed previously, improving teacher effectiveness was enshrined in the College strategic plan. "So, we have a strategic plan, and the focus is on professionally developing teachers across all subjects to develop a curriculum that instils in students, 21st century skills and prepares them for life after school" (HOD 3). The over-arching aim of enhancing pedagogy was supported by a number of processes, the most prominent being teacher professional learning, collectively in communities of practice, as well as individually. "The school is very generous in its support of teacher professional learning. There is a large budget for that. We have a lot of school prescribed professional development days" (HOD 2). "We do an enormous amount of professional learning on site. We also encourage teachers to attend professional development offered by the AIS and their subject bodies such as the History Teachers' Association. Many teachers have or are completing post-graduate study. So, there's a lot happening in terms of professional learning" (Principal). The combination of continuing on-site and off-site professional learning to improve teacher effectiveness is elaborated on in the next two paragraphs.

Building teacher capacity at a whole school level involved an ongoing process of developing deep pedagogical content knowledge to meet the needs of students. "Professional learning in the school is geared to developing teachers to be able to deliver learning for the 21st century" (Teacher 1). "We want teachers to be facilitators of learning rather than carriers of content. They need to be able to deliver the learning framework we are developing. So that will require a shift for some teachers, not all"

(Principal). To that end, staff development days usually had a particular focus, such as curriculum differentiation, facilitated by a guest speaker. Faculties then examined how to implement this, for example, the Maker Model, in their teaching and learning programs, with guidance from the Director of Research and Innovative Learning (Teacher 5). To facilitate a shift in teaching practice where required, a smorgasbord of professional learning was offered, including project-based learning, STEAM strategies, critical and creative thinking, analysing student performance data to inform teaching, and tracking student performance.

The Principal's commitment to research and evidence-based practice led to the expectation that all teachers look for opportunities to improve their pedagogy, supported by the Director of Research and Innovative Learning. "We're very well supported here to pursue our own professional learning" (HOD 1). The staff were regularly sent information on, and encouraged to attend, conferences and courses focused on enhancing their practice. The prevailing culture in the School was that teachers were expected to read the relevant literature, conduct action research, present at conferences, and write journal articles, in order to achieve contemporary best pedagogical practice.

5.8 Summary of Findings

The goal of improving pedagogy through intensive, ongoing professional learning was enshrined in the strategic plan. This ongoing activity occurred on campus as well as off-site. An emphasis on engaging in scholarly activity, particularly professional learning networks external to the School, was a prominent feature of this blueprint. On site, it was found that a distributed leadership approach was taken to

improve teacher effectiveness through a range of professional learning strategies implemented at different levels, whole school, faculty, and individual teachers.

The Principal created a new academic position to assist in achieving this strategic priority. The Director of Research and Innovative Learning operated as the conduit between the SLT and HODs to develop teacher instructional capacity. Staff development days and faculty meetings were important in terms of sharing ideas and resources relating to improvements in pedagogy. The most important finding was that the practices and processes aimed at building instructional capacity were consistent with the approaches adopted by the highest performing school systems as demonstrated extensively in global studies (Barber & Mourshed, 2007; 2009).

5.9 Conclusion

This chapter has presented the main findings from Case Study Two in relation to the four major research questions guiding this thesis. The Principal set a new direction for the School, endorsed by the College Board, and embedded in the strategic plan. The vision of the Head of School was two-fold, rather than singular. Developing a love of learning for its intrinsic rather than utilitarian value, combined with enhancing the well-being of students, represented a two-pronged approach to reform. Embarking on this agenda was courageous on the part of the Principal because it represented a significant historical break, in an academically high performing school where many stakeholders were reluctant to change a winning formula, as determined by outputs in external examinations. This course of action required significant skill and discernment on the part of the Principal and the SLT.

Improvements in the school learning environment and teaching were effectively achieved to a greater or lesser degree in the institution due to several contributing

factors. The Head of School had occupied the role of Deputy prior to her appointment to the position of Principal. This experience gave her an intimate knowledge of context which informed her leadership practices. In terms of approach, stakeholder engagement, a consultative style of leadership, and sharing leadership of school improvement were effective leadership practices. Sustained teacher professional learning to deliver strategic goals, facilitated by a substantial budget, was another productive strategy.

The most salient feature of Case Study Two was the capacity of the Principal and her broader team, including middle leaders, to shift the educational direction of the institution whilst maintaining high academic performance, as well as simultaneously enhancing student and teacher agency. She achieved this effectively by skilfully and judiciously customising her leadership practices, along with complementary systems and processes, to her context.

The next chapter will present the main findings from Case Study Three, following the same pattern as this one.

Chapter 6 - Walk the alignment walk

6.0 Introduction

This chapter presents the main findings from Case Study Three, following the same structure as the previous two chapters. The unique aspects of this case are its demonstration of how a school re-imagined itself by re-framing its raison d'etre, to be fit-for-purpose in the twenty first century. It shows the collaboration of internal leaders and external experts in this process, as well as the extensive consultation of stakeholders, inclusive of students and parents. The outcomes of this reform agenda, particularly the engagement and alignment of key stakeholder groups to the transformed educational direction of the School, are a distinguishing feature of this case study. It essentially represented a process of whole school renewal and revitalisation to enhance institutional outcomes (Andrews & Lewis, 2004). The leadership practices, systems and processes of alignment which underwrote these outcomes, represent the distinctive contribution of this chapter to the thesis overall.

6.1 Research Question One

What practices are implemented by school leaders to improve the school learning environment?

The practices implemented by the Principal and other leaders to improve the school learning environment, and the processes they consist of, are presented below as sub-headings according to the five major themes that emerged from the data, common to all four case studies.

6.1.1 Establishing a school improvement agenda

Implementing a blueprint for school improvement was found to be a major leadership practice of the Head of School. However, the impetus for school improvement emanated from a different source. It was initiated by the College Board

due to an economic imperative underpinning school improvement. That is, due to declining enrolments, the organisation needed to re-invent itself to survive. This led to a review of the status quo, resulting in the Principal being appointed in 2012 with a mandate from the Board to establish the points of difference between this school and other educational institutions in order to increase student enrolments in a competitive market, whilst also meeting parent and community expectations of preparing students for post-school life.

Historically, the institution had been predominantly focused on student well-being outcomes because it was established on the philosophy that children should first and foremost be generally content with life. Consequently, the emphasis was less on learning and more on students being in a state of mental and emotional wellness. The mission of the College was maintained by the current Head's whole-hearted commitment to that philosophy. This focus heavily influenced both students and their attitude to learning, as well as teachers regarding where they placed their efforts. However, as time went on, parent expectations changed to the point that the priority shifted to a demand for academic outcomes above well-being outputs. Feedback from this stakeholder group, supported by the Board due to precarious enrolment numbers, led to a much needed and anticipated review of the mission, vision and values of the School (hereafter referred to as 'mission').

The Principal undertook a comprehensive evaluation of the institution's core purpose and foundational documents. The rationale for the review communicated to stakeholders was that the purpose of the organisation had not been formally evaluated since the School was established in the early 20th century. Since then, the educational landscape had shifted significantly, providing the rationale for a review, with the

intention of setting a new direction for the School, whilst sustaining its distinctive characteristics. The actual purpose of the review, a mandate from the Board to revitalise teaching and learning in order to boost flagging enrolments, was not revealed to the community.

The brief from the Board was described as follows. "To review and refresh our mission and highlight our enduring values, to clarify and strengthen our commitment to the ongoing success of our school" (Principal). She defined 'mission' as a statement of why the School exists, measured in terms of what a high school graduate should know and be able to do upon completing Year 12. The 'vision' was outlined as an aspirational goal imagining the future and preparing students for that point in time. The purpose of the School was ultimately to provide a transformative educational experience for students in order that they would in turn transform the world, for the betterment of the individual and society. The new mission encapsulated the holistic development of students, focusing on both academic and non-cognitive outcomes, with priority given to the former. Collectively, the statement articulated a commitment to meeting the needs of the learner, equipping them with the knowledge and skills to fulfil their potential and make a positive difference to society. This represented both the new manifesto underpinning the institution, and the driver of school improvement reform.

The Principal deployed a number of strategies to achieve the goal of establishing a new mission for the School in the twenty-first century. She approached the AIS for guidance, a practice commonly employed by Heads of independent schools in NSW. Two consultants were subsequently assigned to facilitate the review. External consultants brought to the process, independent expertise and credibility, acknowledged by participants. In Phase 1, separate consultation sessions of two hours with the Board,

staff, parents, and senior students, were conducted. Students in Year 11 and 12 were included in the consultative process because a student voice was considered essential, representing the main stakeholders in the institution. Input from these groups was collated by the consultants and a draft circulated to all stakeholders for further input. Phase 2 involved a second round of consultation with all groups, seeking additional input and refinement. In Phase 3 the SLT worked with the AIS consultants to review and refine the mission. This group settled on a final draft and forwarded it to the Board for review and endorsement.

Following ratification by the Board, a communication strategy was developed by the SLT. The renewed mission was circulated to all stakeholders by the marketing team, who also updated the website and school prospectus, and developed promotional videos as well as hard copy material for circulation to the community. Then, plaques were created for reception, offices, classrooms, and spaces occupied by students and staff. Finally, all teachers addressed the new direction of the School with their students in classes.

The statements driving the new educational direction of the College were operationalised as four foundational goals in the five-year strategic plan. The first cornerstone focused on developing in students a lifelong love of learning, empowering them to take ownership of their own learning, and developing skills for life in their post-school years. The professional learning of teachers to deliver a cutting edge 21st century curriculum and prepare students for life, was the second strategic priority. The third was to upgrade facilities across the campus in order to deliver engaging learning experiences. The fourth goal was sustained engagement of parents as partners in the

process of educating children. The strategic plan was a crucial roadmap which will be discussed in subsequent sections.

6.1.2 Embedding a learning culture in the school

The refreshed educational manifesto represented a significant historical shift in the direction of the School from a focus on student welfare to learning, particularly during the tenure of the current Principal. Developing a learning culture to facilitate achievement of the strategic plan and ultimately, the purpose of the School, emerged as a critical issue. This particular goal was built on a two-pronged strategy. The first was engaging teachers, parents, and students in embedding learning in all dimensions of the School to create a community of learners. The second included implementing new learning programs and initiatives in the institution.

Teaching staff were targeted as the first port of call in this stratagem. "Teachers turned out to be the most straight-forward group to engage because teaching and learning is their core business. It's what they are most passionate about. Their experience and skills are greatest in curriculum" (Principal). Professional learning of teachers to build instructional capacity, at a school or department level, gradually replaced the emphasis on student welfare. This approach generated constant dialogue among teachers, within and across subjects, about improving professional practice and the concept of 'value-add' to student learning. Detailed strategies and processes dedicated to improving teacher effectiveness will be discussed further in Research Questions Two and Four.

The role of the Deputy Principal in building the learning culture of the School, was acknowledged by faculty leaders who worked closely with him. "The Deputy has been instrumental in articulating and developing the learning culture in the school"

(HOD 2). "He has introduced academic rigour into the school, particularly in Year 7-10. He articulates high expectations of students. He expects teachers to teach effectively and supports them to do so. This has assisted all teachers to focus on the curriculum, and students on their learning goals" (HOD 4). The process implemented by the Deputy to achieve this goal was to constantly focus students on learning via the mantra of 'Rights and Responsibilities'. Students were made aware they had an absolute right to the best possible education available to them. Accompanying that entitlement was a set of responsibilities with regard to the learning of self and others.

One of the main strategies with regard to learner engagement was providing varied opportunities to learn within and beyond the classroom, whilst catering for different learning styles and interests. This provision of learning offerings was accompanied by promoting ownership of learning. High expectations were communicated to students in terms of their attendance, organisation, time management, and time on task during lessons. Goal setting was introduced as a mandatory expectation of all students, constantly monitored by teachers and Year Coordinators. Students were then held accountable to the learning goals they set and the extent to which they were achieved. Developing the requisite skills to be a successful learner became a prime focus with regard to empowering students to learn. This capacity building of students was supported by a subscription to the *Study Skills Handbook* online, paid for by the School and accessed free via an allocated username and password, at any time during the week.

The importance of the learning process and strengthening the academic culture of the School were also promoted by the introduction of a range of programs designed to engage students in scholarship. The programs were mostly academic in nature, but

also included a range of well-being initiatives to support building of learning capacity through the development of skills to facilitate better physical, mental, social and emotional health. Critical and creative thinking, project-based learning (PBL), inquiry learning, and digital literacy, were targeted as essential skills to be developed in students to prepare them effectively for the present, and their future. Learning beyond the classroom, particularly hands on education about environmental sustainability, was also established as a priority in the curriculum. A practical example of this approach in Stage 4 pertained to the Mandatory Technology syllabus. The food technology and agriculture topic enabled teachers and students to establish vegetable gardens and orchards on the School grounds, maintained almost exclusively by students. More will be said about this in another section.

Another instance related to Stage 5 Geography where students learnt about sustainable food supply by researching the indigenous community's relationship with the land and then implementing their agricultural techniques at a sustainability farm in the Southern Highlands. Well-being initiatives were implemented by the Sport Coordinator to develop student readiness for the main purpose of learning. They included commencement of a breakfast club where students were provided a nutritional meal before the first lesson of the day. Installation of a body weight resistance gym provided the opportunity for students to engage in physical exercise during timetabled breaks. Whole school mental health programs such *MindMatters, The Resilience Doughnut* and the *Ophelia Project* (a mentoring program for teenagers with relational aggression), were also implemented in conjunction with the above initiatives.

The two-pronged approach of focusing students on their learning, whilst supporting them concurrently with the delivery of well-being programs, proved to be

an effective improvement strategy. A significant finding in this regard was that well integrated goals aligned to school improvement had a high probability of success.

6.1.3 Leading teaching and learning

Whilst the Principal led the parent engagement strategy, leading curriculum and pedagogy were not her forte. To achieve strategic goals related to learning, she made crucial staff appointments. The first, and one with the most impact, was the recruitment of a new Deputy Principal. He was highly credentialled, as both a former Head of Department and Head of Curriculum, with a strong track record in curriculum and pedagogy. "The Deputy has great street cred[ibility] with staff. They value his knowledge. He is also well respected by senior students in particular. So, he has been able to really disrupt the status quo" (HOD 2). His experience and expertise in teaching and learning related matters, were acknowledged by research participants. He was certainly the main instructional leader in the School, competently supported by the SLT and HODs.

At the recommendation of the Deputy, other staff were recruited to share leadership for learning. A Learning Support Coordinator, who reported directly to the Deputy, was appointed to drive the implementation of individualised learning plans, including individual adjustments for the federal government mandated Nationally Consistent Collection of Data [NCCD] pertaining to funding for students with a diagnosed physical or mental health condition. Although not directly accountable for learning, a Well-being Coordinator was recruited to work in the Pastoral Care Team with Year Coordinators, to implement initiatives aimed at promoting student wellness. These staff appointments were crucial in contributing to the quality of teaching and learning in the School, as well as providing cohesion to strategic goals.

The re-imagined purpose of the institution, to prepare students for work and citizenship after graduation, required their empowerment to be "creators of knowledge, not consumers of information" (Principal). This demanded of teachers a role as socratic facilitators of learning, "kindling the flame, not filling the vessel" (Principal). Critical to achieving this, was their professional learning at a whole school level, during staff development days and meetings. The additional impetus for changing praxis and creating reflective practitioners, was provided by the state government mandated registration and accreditation process, conducted by NESA. This compliance exercise which all independent schools undertake in six-year cycles, was welcomed as an opportunity to introduce a student-centric pedagogy designed on future focused learning principles. Aiding and abetting this legislative requirement, was the concurrent implementation of both the Australian Curriculum and NESA syllabuses. Collectively, the merging of these forces, represented the perfect storm for writing new programs from 7-12 to not only re-design pedagogy, but also to strengthen the learning culture of the School to facilitate effective teaching and learning. This approach was a distinctive characteristic of this institution.

The process of re-prioritising learning in the School, is best captured by the NESA inspectors who examined the curriculum documentation presented for review. Their general feedback included commendations for the quality of teaching and learning programs, assessment tasks, scope and sequence schedules, and student work samples. Particular mention was made of the differentiated learning activities for all students, and the adjustments for students with a disability, in relation to their individualised learning plans. One participant was both quick and gracious in acknowledging the work of the Deputy in leading this process at a whole school level. "He has brought a new

focus to the school. Learning is now our 'core business'. It's our number one strategic priority" (HOD 2). The Principal pointed to other indicators that the learning culture had shifted significantly. She conducted a tour of the campus for my benefit, where a high level of student engagement in learning was evident, as opposed to the past, she hastened to add. Mention was also made during the walk-throughs that there were fewer parent and student complaints about teaching and learning, in recent times. Finally, there was also acknowledgement that the results of parent and student surveys indicated an overall satisfaction with the direction embarked upon by the School since changing tack.

6.1.4 Leading change

The previous section discussed leadership of teaching and learning, noting that the Deputy Principal was appointed as an agent of change in leading this dimension of the College. Similarly, the Principal considered her right-hand man the ideal proxy to lead change, with special regard to transforming the school learning environment and establishing learning as the institution's main goal. Her role was to engage stakeholders and persuade them that the new direction embarked upon by the School, served the best interests of students and families. A significant finding here was the division of labour in terms of the Principal implementing transformational leadership practices such as the parent engagement strategy, and the Deputy leading teachers in the instructional priorities of the School.

Vocational Education and Training [VET] courses was one of the significant changes introduced into this school. It represented a broadening of the curriculum to cater for students interested in pursuing a vocational career, particularly in the retail and hospitality industries. This widening of the curriculum presented the additional

advantage of attracting further enrolments to the College, a strategic aim of the Board. "It allows students who are seeking a less academic pathway to engage in subjects and skill development pertinent to a vocational career. It also builds links with external agencies and gives these students an opportunity to experience a tertiary style learning environment whilst still in secondary education" (HOD 1). The institution, lacking both the budget and the facilities to deliver VET courses on campus, undertook a twelvemonth process under the leadership of the Deputy, to provide this opportunity for its senior students. It involved consultation and negotiation with third party providers, such as Technical and Further Education [TAFE] and Trades Training Colleges, until an agreement was finally reached whereby students could avail themselves of VET courses at external venues, one afternoon per week during school term. The weekly, four-hour lesson was supplemented by two weeks of annual industry related work placement. This initiative achieved an additional historic milestone of celebrating learning in terms of a different skill set and experience.

Another significant change introduced by the Deputy was the flexible completion of the Record of School Achievement in Year 10 and 11, as well as the HSC in Year 12. The rationale for this initiative was outlined as follows. "Some students are quite unwell due to anxiety, depression or other mental health conditions. They need support and a tailored timetable in order to work at subjects in smaller 'chunks' to achieve success" (HOD 3). Participants explained how and by whom change was being led in the School. The general consensus was that in matters relating to curriculum and pedagogy, the Deputy Principal was the main agent of change. He was highly respected, and his advice sought. "His passion for teaching and learning is infectious. He is extremely well read about the latest research in education. He provides professional readings. He shares his

knowledge and expertise. More importantly, he walks the journey with teachers" (HOD 4). Another curriculum leader also acknowledged the work done by the Deputy with teachers to move them forward. "I think what we value most is the fact that he's non-judgmental. People trust him because he seeks to support not criticise. He has great empathy for teachers. He constantly acknowledges and affirms them in their work. So, staff are happy to make the journey with him" (HOD 1). Research participants described the Deputy as an astute choice as instructional leader. His 'hands-on' practical and inclusive approach motivated staff and secured the all-important engagement essential to effectively leading change (Kotter, 2012). The sporadic resistance to this significant shift in the direction of the School will be examined in a subsequent section.

6.1.5 Distributing leadership

The Principal acknowledged that leading school improvement is too demanding a task for one person. In Case Study Three, distributed leadership at an organisational level was exercised collaboratively by the SLT, consisting of the Principal, Deputy, Director of Curriculum, Director of Professional Learning, Director of Students, Director of Information and Communication Technologies [ICT], and the Director of Finance and Business Operations. This group functioned as a steering committee and led school improvement according to their area of expertise. However, their collective leadership was found to be less democratic and more of a hierarchical, top-down approach in comparison to the other schools, where a flatter leadership model was in operation.

In this context, the school improvement agenda was driven by the SLT, albeit in unequal parts. A clear distinction existed between team members in terms of their role in the leadership of school improvement. The Principal was concerned primarily with strategic matters at a school level. Her remit included: working with the Board, leading

the review of the School mission, developing and implementing the strategic plan, and engaging parents.

The Deputy Principal led in different areas to the Head of School: curriculum, pedagogy, and economic matters as he possessed considerable business acumen courtesy of a Master of Business Administration and significant practical experience.

Consequently, he worked closely with the Director of Finance and Business Operations to bankroll school improvement initiatives. Nevertheless, his main area of expertise was working with HODs to develop curriculum and embed best practice pedagogy in the College. As discussed previously, he led curriculum compliance such as the NESA registration and accreditation process. The Deputy also played a significant role in developing the instructional leadership capacity and agency of middle leaders.

According to one participant, he was skilled in leading staff meetings and teacher professional learning (HOD 1). His style of leadership was described as democratic, in contrast to the Head of School who was described as 'autocratic' (HOD 3). The Director of Curriculum was also assisting HODs, although in a different dimension. She had oversight for STEAM projects in the School. HODs were confident in her expertise in this area due to her Science and Technology background. The Director of ICT was responsible for overseeing all technology related matters and was regarded by interviewees as an outstanding performer in this regard. The SLT thereby, functioned as a guiding coalition to drive change and contribute to school improvement goals.

6.2 Summary of Findings

Implementation of a school improvement agenda underpinned by a strategic plan and endorsed by the Board, was a predominant leadership practice in this institution. The Principal developed a school improvement blueprint that was not

unique. However, a significant difference in this context was the driver of school improvement, an economic imperative to boost student enrolments and thereby ensure the financial sustainability of the organisation.

Another important finding was the Principal's intimate knowledge of her context and how that informed the internal reform agenda, which essentially involved a new educational direction and shift in the learning culture of the School. In this regard, a review of the mission of the institution was undertaken, guided by external consultants, which led to a re-shaping of its core purpose.

Another significant finding was that the strategic goals were well integrated. The plan to lift the academic profile of the College, and in tandem, deliver student well-being programs to increase their engagement in learning, was found to be welcomed by stakeholders on many levels. Teachers felt the School had finally got its priorities in order. They appreciated the changing culture and its focus on teaching and learning. Students similarly appreciated the revitalisation of the curriculum and the new learning opportunities it brought. Parents literally voted with their feet to be involved in curriculum delivery. Secondary schools often pay lip service to the notion that parents are the primary educators of their children. In reality, parents in many educational institutions are on the margins in terms of school involvement. In contrast to the trend in the sector, parent engagement at this institution was a real success story.

The findings from this site confirmed the main theoretical assumption underpinning this thesis, that school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to develop the school learning environment to improve teaching and learning. Transformational leadership was demonstrated by the Principal in relation to

her leadership of the review already described, and her engagement of parents. The Deputy was the best exponent of instructional leadership, working with HODs in a collaborative way to improve teaching and learning. The Director of Professional Learning was leading the learning of staff at a school and faculty level. Whilst a distributed approach to leading change was evident in this context, the SLT was less consultative and more directive than the norm. Another significant finding in this regard was that the executive team effectively used a compliance agenda, school registration and accreditation, to provide momentum for the reform agenda.

6.3 Research Question Two

What practices are implemented by faculty leaders to improve the faculty learning environment?

The practices implemented by middle leaders to improve the faculty learning environment and the processes they include, are presented below as sub-headings according to the five qualitative characteristics in the DMEE (Creemers & Kyriakides, 2008). In this School, the absence of an Assistant Head of Department meant that faculty leadership was the exclusive responsibility of the HOD, with support from experienced teachers to share the leadership for learning workload, if not accountability.

6.3.1 Developing effective teaching

The main strategic priority of HODs in this context was improving the quality of teaching. It was clear from participant feedback that middle leaders were proactively leading teaching and learning, through a range of strategies, based on collaboration and sharing of practice. They were in turn taking their lead from the main architect of this dimension of school improvement, the Deputy, who was reportedly skilled in leading change. His attendance at faculty meetings was appreciated as he guided staff through the process of developing effective teaching.

One middle leader, like most of his peers, was supportive of the new direction of the School and moving with it. He believed the most valuable process in improving pedagogy in his team, with the assistance of the Deputy, was release from face-to-face teaching to collaboratively write assessment tasks, scope and sequence schedules, programs, as well as differentiated teaching and learning strategies (HOD 2). However, he did acknowledge that his faculty was agile and able to adapt quickly to change, precisely because he was leading a small group of teachers.

Another faculty leader concurred that securing engagement was not difficult in the Languages Department, again due to a similar number of teachers in the team (HOD 1). According to her, the most effective strategies in terms of improving teaching were two-fold. First, discussion of best practice pedagogy occurred frequently at faculty meetings, with herself and the Deputy Principal facilitating the dialogue, based on research evidence. These conversations created a consensus of what excellent teaching of languages looked like in reference to the AITSL teaching standards framework.

Second, discourse about best practice was reinforced by modelling of excellent teaching by the faculty leader and observed by other teachers in the group. Observations of exemplar practice were then discussed by the team at their weekly meetings. According to another middle leader (HOD 4), this recursive practice of dialogue, followed by demonstration and observation, and further discussion leading to self-reflection and evaluation, was regarded as most effective in the process of building the instructional capacity of teachers in her faculty.

Mentoring of less experienced teachers by the faculty leader and senior colleagues in the department was regarded as another valuable process in developing teacher instructional capacity (HOD 3). It consisted of video-recording lessons,

providing feedback, teachers reflecting on their practice, and consequently amending teaching and learning activities to differentiate the curriculum. "The introduction of individualised learning plans has increased my understanding of how students learn differently. 'A one-size-fits-all approach' won't do anymore. I have to adapt my teaching strategies to meet the needs of the individual learner" (Teacher 1). Mentoring of middle leaders by critical friends external to the School, was also regarded as highly beneficial in developing instructional leadership. One HOD took up the offer by her counterpart in another college, to visit their institution and be mentored by them. The same leader (HOD 3) invited the English consultant from the AIS to visit the School and be coached by her. Networking more broadly in the sector extended to joining professional organisations such as the English Teachers' Association, as well as marking of the HSC. These strategies were found to have a positive relationship to developing teacher instructional capacity in the English faculty. These data provide interesting insights into effective leadership practices and processes that contribute to developing instructional capacity at a macro level, absent from the literature.

6.3.2 Allocating resources to support teaching and learning

Another significant practice employed by HODs to improve the faculty learning environment, and one closely aligned to developing effective teaching, was the provision of resources to facilitate quality teaching and learning. The Director of Information Technology had overseen substantial developments to facilitate the delivery of the Stage 4 Mandatory Technology syllabus, such as refurbished Design and Technology rooms, and the purchase of a pizza oven for the Food Technology course. The recently refurbished Languages Centre included the creation of open learning spaces and installation of air conditioning and carpet in all classrooms (HOD 1). These

learning areas also included data projectors, a combination of interactive whiteboards, and access to Google Classroom for students and parents. They also featured lounges and flipped tables for collaborative learning, and single desks for independent learning. These facilities were considered essential for contemporary teaching of languages and had increased the number of students electing to study this key learning area, beyond the mandatory curriculum.

A generous budget was also allocated to facilitate infrastructure upgrades and the purchase of resources to support effective teaching and learning. The music rooms were sound-proofed during the tenure of the current Principal, who approved the purchase of many class-sets of instruments as well as individual pieces, which represented a great boost to the teaching of this subject, as students voted with their feet (HOD 2). The PDHPE Department had similarly benefited from the allocation of substantial funding to upgrade its resources. The huge outlay on physical resources included a new gymnasium equipped with the latest sports equipment, which again contributed to greater student engagement in the subject (Teacher 2).

A Science teacher spoke of a similar experience resulting from the refurbishment of laboratories to incorporate wet and dry areas, a new fume cupboard for Chemistry experiments, and an upgraded chemical storage area (Teacher 3). New furniture was purchased to create flexible learning areas. Additionally, expenditure on IT included acquisition of new texts and online resources such as Stile. The budget also provided for extended hours for laboratory assistants. This level of resource allocation contributed to smoother delivery of the Science curriculum, particularly new syllabuses in Stage 6.

The creation of ergonomically viable learning spaces was also a feature of this institution. The Head of School was determined to create well-designed spaces that

cater for student mental health needs such as harmonious and ambient learning spaces that minimise stress and noise. "We take them into account wherever and whenever we can in our design of the learning environment. Natural materials and soft colours together with functional furniture are the core design of our classrooms. In that landscape we provide an environment for students to create their own learning experience" (Principal). She spoke with pride about the environmentally sustainable facilities implemented to support the delivery of the STEAM curriculum. These included investing in eco-friendly initiatives such as the installation of solar panels, recycling rain and storm water through storage tanks diverted to cisterns, as well as watering systems for lawns and gardens, and colour coded recycling bins.

Discussion of the process of substantial investment in upgrading facilities, is not a topic I have encountered in the School Effectiveness and School Improvement literature. Nevertheless, a significant finding was that the Principal considered this dimension of the School to be critical to supporting effective teaching and learning, and student well-being. It is an important transformational leadership practice that motivates staff and enhances their morale. It is an equally important instructional leadership practice that engages students in learning.

6.3.3 Developing positive attitudes to learning in students

Along with developing effective teaching, and allocating resources to facilitate quality instruction, developing positive attitudes to learning among students was another key practice implemented by middle leaders to improve the faculty learning environment. Replacing external rewards with internal motivation was a key strategy in terms of shaping the desired student attitude to learning. "We encourage intrinsic rather than extrinsic rewards. We facilitate the learning that will allow students to

flourish at school and afterwards. Therefore, we don't accept rigid educational policies that favour teaching to the test over students' authentic learning and well-being. We are pushing hard against that trend" (Principal). The expectation was that students would develop inherent motivation for a enduring love of learning that would sustain them throughout life.

The HOD role in developing positive attitudes to learning in students, was to reinforce in their faculty, the overarching educational philosophy of the School. Placing equal value on all subjects in a STEAM based approach to the curriculum, was having a transformational impact on middle leaders in terms of their level of motivation to deliver the curriculum specific to their subject. "It's thoroughly inspirational to hear our executive team say that the Arts are as important as any other subject. That has a huge impact on the morale of my teachers. You can't buy that sort of publicity" (HOD 2). Aligning the faculty to the School's educational philosophy of holistic development of students via a balanced curriculum, was therefore, a more straightforward proposition in some faculties.

Other faculty leaders spoke of consistent practices across the School which positively focused the attention of students on the core business of learning. This institution recently introduced individualised learning plans for students with a formally diagnosed physical or mental health condition, following the implementation of NCCD which necessitated adjustments for students with identified learning difficulties. This initiative impressed upon students the need to make learning their highest priority. They accepted the belief articulated by teachers that every student can achieve their full academic potential with the appropriate application. "Our goal is to provide every student in every lesson with a valuable learning experience" (HOD 1).

The primacy of learning was further emphasised by a focus on syllabus outcomes. To this end, every lesson in the School commenced with teachers writing or projecting onto the whiteboard, 'Learning Intentions' (outcomes) and 'Success Criteria (level of achievement) expected in every lesson (Hattie, 2009). High expectations of students were also the norm in classrooms (HOD 3).

A range of other initiatives was also serving to motivate and engage students in their learning. Programs across all subjects contained differentiation strategies including remedial as well as accelerated progression through the curriculum. Learning in stages as opposed to year groups, an integrated curriculum delivered through PBL, use of teachers' aides and the Independent Learning Centre, comprised a range of approaches that were contributing to the effective engagement of students in learning. One middle leader (HOD 1) attributed this phenomenon in her subject area, to an emphasis on self-directed and independent learning, often facilitated by online platforms and the 'Bring Your Own Device' policy of the School.

6.3.4 Managing student attendance and behaviour

The historic focus on student well-being outcomes had produced unexpected and unwelcome results. First, a general lack of consequences for inappropriate student behaviour had led to widespread classroom management issues. This scenario adversely impacted cooperative and compliant students to the point that families voted with their feet, enrolling their children in other schools, resulting in the attrition of valued students and families. Second, and equally problematic was the student attendance rate which sat at approximately 80% for twenty years, 10% lower for instance, than the benchmark set by the NSW Department of Education. The Board was concerned about this situation, fully cognisant of the impending school inspection by

NESA for registration and accreditation purposes. This apprehension on the part of the governing body, was one of the factors that led to a review of the mission of the School.

Following this evaluation, as discussed, a new blueprint for the future was established, focusing on the pursuit of student academic outcomes. An emphasis on social and emotional well-being was concurrently maintained, primarily as a pathway to students achieving their academic potential. In order to achieve this aim, the Principal made two highly tactical appointments, a Well-being Coordinator, and Learning Support Coordinator. The remit of these staff members was to assess students individually, and in consultation with their families and attending health practitioners, implement relevant plans focusing on: attendance, behaviour management, mental health, as appropriate, on a case-by-case basis. These individual learning plans were implemented over a period of 12 months, and reviewed annually.

A suite of other programs was also introduced to build student capacity and agency in order to improve attendance, learner engagement and achievement. As discussed in a prior section, mindfulness initiatives such as the *Growth Mindset*, the *Resilience Doughnut*, and the *Ophelia Project*, were contributing to the desired outcomes. In addition, mentoring and peer support programs led by students, were also introduced. They eventuated as a result of proposals advanced by students on the Student Representative Council, or from the Well-being Team in consultation with staff and parents, and then approved by the SLT. "These programs allow students an opportunity to discuss important issues with Year Coordinators and the Well-being Coordinator. They can share ideas with their peers. It is a good space for students who find it difficult to break into friendship groups" (HOD 4). This integrated approach to learning was regarded by the Head of School as more evidence based than anything that

had existed previously. "Our current values and practices are supported by international research into raising healthy, motivated adolescents and can lead to more effective learning. It is more holistic" (Principal). She also acknowledged the contribution of the Deputy who had implemented systems and processes to monitor student attendance, behaviour, and learning, across the School, including a new administration package which contained modules covering each of these areas, which was positively received by teachers and non-academic staff.

6.3.5 Engaging parents in the learning agenda

Parent engagement was an integral component of the strategy to embed a learning culture in the School. "We know from the research that when parents are involved at school, their children perform better. So, there was a general recognition that increased parental involvement would strengthen student commitment to learning, as well as a sense of community and connection throughout the school" (Principal). The Head, a former parent of this School, was passionately committed to family engagement as a strategy to enhance student outcomes. Based on my on-site observations, I found a high level of parent involvement here, compared to my own school.

Parents were engaged in several significant ways in the broader life of the institution. They were invited to, and attended in large numbers, information sessions about the implementation of the Australian Curriculum and new NESA syllabuses, as well as registration and accreditation, thereby demonstrating a deep interest in curriculum and regulatory matters. They also participated enthusiastically in the review of the mission. At parent forums, they were asked to complete a skills audit, an exercise which required them to nominate their professional area of expertise. They were later

surveyed as to their level of preparedness to be involved in teaching and learning relevant to their skill set.

This invitation to be involved in school life led to an unprecedented level of parent engagement. "The response we got from parents was just overwhelming. They had been sitting there all these years, just waiting for an opportunity to be involved, somehow, somewhere. It was unexpected and amazing" (Principal). Parents acted as experts and consultants in myriad ways: engineers assisting in design and technology classes; café owners and caterers assisting with food technology; arborists, gardeners and landscapers working on environment sustainability projects; professional musicians accompanying bands; fitness instructors running classes such as yoga with the Sport Coordinator as part of the physical education program; academics providing careers advice; health workers such as paramedics instructing students in first aid treatment; Police presenting on cyber security and road safety; and occupational therapists assisting students on the Autism Spectrum, in lessons. The extent of parent involvement was also noted in increased attendance at parent/teacher nights, subject selection meetings, and various other events such as school assemblies.

6.4 Summary of Findings

In terms of improving the faculty learning environment, several significant leadership practices were found to be implemented. In this context, improving teaching through intense and ongoing professional learning was the highest priority. The appointment of a Director of Professional Learning was proving effective in terms of working with faculties to improve pedagogy. A range of other strategies included relief from face-to-face teaching to collaborate with colleagues and share best practice pedagogy in PLCs, as well as mentoring of NSTs by more experienced staff. Additionally,

teachers cooperated within and across faculties to develop an engaging curriculum, which was found to contribute to improvement in student attendance, and reduction in the occurrence of student management issues. An important evolution in terms of setting learning goals, was the implementation of individualised learning plans for nominated students. To engage students to a greater extent in learning, the School had invested heavily in technology and delivered on its plan to create an eco-friendly environment. The introduction of student well-being programs such as *MindMatters* to build resilience and alleviate assessment related anxiety, was also contributing to increased attendance and engagement in learning.

A significant finding was the success of the parent engagement strategy.

Traditional parent satisfaction surveys were not administered annually to gauge approval of the institution's performance, a common practice in schools. In this environment, parents were actively engaged in reviewing the mission of the College.

Additionally, parents were invited to, and participated enthusiastically in curriculum delivery as industry experts. These practices emphasise the finding that this school deployed highly context specific interventions to pursue its strategic goals.

6.5 Research Question Three

What practices are implemented by school and faculty leaders to align the faculty learning environment to the school learning environment?

In this environment, the SLT and HODs employed a range of context specific strategies to align each faculty to the school learning environment. These leadership practice and the processes they consist of, are discussed below.

The remit of the Deputy Principal and HODs was to align all faculties to the school strategic plan through the development of a faculty roadmap. Essential to this approach was the practice of the Deputy coaching and mentoring HODs in strategic and

instructional leadership. Another common approach was whole staff or faculty professional learning sessions, facilitated by a member of the SLT or HOD. A distinctive strategy in this Case Study, was the use of regulatory requirements in the form of NESA registration and accreditation, combined with the requisite implementation of new syllabuses, to align faculties to the mission of the School.

The College had undergone NESA registration and accreditation in 2018. Whilst compliance with curriculum requirements was non-negotiable, the approach was to use this process to provide momentum to the new direction of the School. "We've just gone through the process of registration and accreditation. It was never about compliance for us as a school. The goal was always about excellence in teaching and learning. We were able to achieve that because of a singular focus on improving pedagogy and student outcomes" (Teacher 4). The outcome of the inspection represented a resounding affirmation of the school's strategic goals. It was also a testament to its strategic alignment and strategic consensus (Ates, Tarakci, Porck, van Knippenberg & Groenen, 2017), the capacity of the institution to effectively align its systems and processes to organisational strategy (Kuipers & Giurge, 2020).

The implementation of new NESA syllabuses also signified much more than mere compliance with regulatory requirements. It was a timely opportunity to embed the new direction of the School in curriculum documentation. "Our programs were written collaboratively. They're highly student centric in terms of differentiated teaching and learning strategies. They're also standards based in terms of quality assessment of student learning. So, it's in keeping with what other departments are doing and where the school is heading" (Teacher 5). The new Stage 6 Mathematics, Science and PDHPE syllabuses were all implemented according to the new direction set by the School.

Coaching and mentoring of HODs by the Deputy Principal, were achieving the dual outcome of developing the leadership capacity of this group as well as aligning their faculty to the School learning agenda. One middle leader noted that she had worked with the Deputy to write her faculty plan reflecting the mission of the School. She acknowledged that individualised learning plans and student-centric lessons had the effect of empowering students in their study of languages (HOD 1). A significant finding that emerged from the responses of middle leaders was that they were supported and encouraged to follow the lead of the Deputy Principal in a range of areas.

Ongoing professional learning sessions at a faculty level, facilitated at various times by the HOD and Deputy Principal, were instrumental in aligning faculties to school strategic goals. "He's in the trenches with us. That makes a big difference in motivating us and maintaining our momentum" (HOD 2). The support and affirmation from the Deputy Principal were acknowledged as critical in moving faculties forward. One respondent reflected on strategies that were becoming commonplace across the School. "Our HOD has adopted the approach taken at a whole school level. By that I mean, creating working committees to pursue a particular topic in Visual Art. For example, we had a committee investigate 'Changing Media Practices'. We then discussed how we can teach this to our own classes and wrote the strategies into our programs" (Teacher 1). Other effective approaches included sharing both dialogue about best practice pedagogy and resources.

Various processes, internal and external to the School, were also contributing to the professional learning of teachers. Visits to other schools to share ideas and observe the pedagogical practices of colleagues were viewed as valuable in improving teaching and learning. This was particularly appreciated by the PDHPE faculty which had

introduced several health initiatives into the School as a result of networking beyond its own borders (Teacher 2). A similar phenomenon occurred in the introduction of VET subjects. This was reportedly assisting significantly in terms of engaging less academically inclined students in learning (HOD 4). Another successful process in relation to improving pedagogy and student engagement in learning was the sharing of professional practice at weekly staff meeting. "Each department, on a rotating basis, has to speak to what initiatives we have introduced into classrooms as part of our faculty strategic plan" (HOD 3). Membership of professional organisations, joining HSC examination committees, and undertaking HSC marking, had all become widespread across the institution as HODs and teachers strove to achieve their faculty goals and align themselves to the overall direction of the School.

6.6 Summary of Findings

The size and scale of the School were such that faculty leaders did not have an Assistant HOD with whom to share leadership. Therefore, alignment of each faculty to the school improvement agenda was the exclusive responsibility of the HOD.

Nevertheless, they were firmly supported in this process by the Deputy Principal and Director of Professional Learning. For instance, they shared the leadership of professional learning to deliver the STEAM curriculum, usually during faculty meetings. They also actively led the mentoring and coaching of teachers to improve their pedagogy in the context of the development and delivery of new syllabuses.

Additionally, HODs were required to develop annual faculty plans that dovetailed with school goals. They also focused on creating a faculty culture that facilitated collaboration between teachers to build instructional capacity. Distinct to this case study, however, was the phenomenon of using the NESA regulatory framework as the

impetus to improve teaching and learning across the organisation. The significant finding here was that the Principal seized upon an external mechanism to add both alignment and momentum to her internal reform agenda, a strategy available to all school leaders in Australia, regardless of jurisdiction.

6.7 Research Question Four

What practices are implemented by school and faculty leaders to improve teacher effectiveness?

The practices implemented to build instructional capacity and those with designated responsibility for them, along with the processes therein, are explored in this section. The main finding was that sustained internal and external professional learning of teachers to deliver a revitalised curriculum, contributed to greater teacher agency and student engagement in learning.

Improving teacher effectiveness was one of the four main objectives in the strategic plan. This goal was based on the strategy of delivering sustained teacher professional learning at both a whole school and faculty level. The Director of Professional Learning position was created to lead the College in this objective. At an organisational level, six annual staff development days were allocated to building the instructional capacity of teachers. Each day was allotted to enhancing a particular dimension of pedagogy, such as differentiation based on the *Tomlinson Model*. The structure of these days consisted of three distinct phases. The first was a plenary session facilitated by an external expert, in the form of an academic or education consultant. The second was a faculty gathering where the HOD would lead a discussion of the research presented in the first session. This workshop focused on applying the evidence base to a specific subject, followed by sharing of discipline specific pedagogical

practices within the faculty. The third and final session involved all teachers reconvening to share their most effective teaching strategies.

Historically, annual staff development days, prior to the appointment of the Deputy Principal and the Director of Professional Learning, were not altogether well-received by teachers. "Too many programs were introduced too quickly and in a fragmented and piecemeal fashion. That's before the current regime. The Deputy Principal has brought an integrated approach to what we do, based on achieving academic excellence through rigour and high expectations and accountability" (HOD 4). "Since the Deputy joined the school there has been a sharper focus on improving teaching and learning" (Teacher 5). It is evident from these data that the Deputy Principal was able to strategically focus the mind and energy of teachers on professional learning to improve the quality of teaching and learning. He was clearly the main instructional leader in this institution, whilst the Head of School was more adept at transformational leadership practices such as parent engagement.

Another important process in terms of building instructional capacity was the weekly whole staff professional learning session, again focusing on a particular theme or topic. "There are good opportunities to share professional practice at staff meetings. We then write these strategies into our programs, introduce them in our lessons, review how they went and report back to the whole staff. This is a very valuable practical experience for teachers and really beneficial for students" (HOD 3). "We have a process where every faculty has a turn at presenting. The presentation of exemplar curriculum documentation by head teachers and teachers has been particularly helpful" (HOD 1). In the two hours allocated to staff meetings, rather than listening passively to a speaker, the Deputy or a nominated leader conducted a workshop where teachers were actively

engaged in sharing teaching and learning strategies that were having a positive impact in the classroom in terms of learner engagement.

At a faculty level, building instructional capacity had also reportedly been more effective under the current regime, led by the Deputy Principal and HODs. A common process at weekly faculty meetings was ongoing collaborative review of assessment tasks, scope and sequence schedules, programs, registers, and feedback to students. "I found peer review and endorsement very powerful. There's no top-down system at work in this type of approach. You're getting affirmation and kudos from your colleagues, the best possible 'pat on the back' you can get" (Teacher 2). Other effective processes undertaken at a faculty level included networking with local schools. For example, PDHPE teachers visited neighbouring schools to learn from colleagues about the most effective way to implement the new syllabuses in Year 7-10.

Additional initiatives included teacher visits to colleagues' classes to observe best practice and share ideas, breaking down the silo effect in the faculty. The most discussed aspect of teacher professional learning among respondents was "the professional dialogue that takes place all of the time" (HOD 4). This discourse reportedly contributed to improvements in teaching and learning such as: enhancing questioning strategies; reducing summative assessment and increasing formative assessment to meet the components and weightings requirements of new Stage 6 syllabus such as English, Mathematics, Science and History; introducing varied assessment tasks – multimodal, visual and oral; implementing flipped lessons in Stage 6; and engaging students by limiting to 10 minutes teacher 'chalk'n'talk'.

6.8 Summary of Findings

A significant finding in this case study was that a distributed or shared leadership for learning approach was taken to improve teacher effectiveness through a range of professional learning strategies implemented at different levels: whole school, faculty, and individual teachers. At a school level, the Deputy Principal implemented a strategy of building teacher instructional capacity through well-planned, cohesive staff development days targeted at a different aspect of pedagogy, such as curriculum differentiation. The Principal created a new academic position, the Director of Professional Learning, to collaborate with the Deputy to build teacher agency. The Director introduced the system of weekly professional learning sessions, focusing on a particular theme. She also worked with faculties to implement discipline specific pedagogical practices. At a faculty level, constant sharing of resources and ideas was contributing to improvements in pedagogy. Additionally, HODs worked on a one-to-one basis with individual teachers to develop their skills and confidence. External school visits and joining professional bodies were also encouraged and supported. The main finding was that the sustained professional learning of teachers contributed to enhanced pedagogy and greater student engagement in learning.

6.9 Conclusion

This chapter has presented the findings from Case Study Three in relation to the four major research questions guiding this thesis. A significant finding was the development of a school improvement blueprint, ratified by the College Board, and enshrined in the School strategic plan. The Principal's knowledge of her context, and its impact on her judicious leadership decisions, was another important finding. Interestingly though, the driving force of the reform agenda was an underlying need for

institutional survival in a highly competitive market. Another salient finding was that because the organisation was in dire financial straits due to declining enrolments over a prolonged period of time, the School was forced to re-invent itself to remain relevant and sustainable into the future.

This transformation included a revitalisation of the curriculum and pedagogy, an expansive upgrade of facilities, and establishment of a strong learning culture, contributing to greater engagement of students in learning, higher attendance, and fewer behaviour management issues. Another outcome was an unprecedented level of parent engagement in the life of the School. A distinctive characteristic of this school was a phenomenon referred to in the corporate world as strategic alignment and strategic consensus (Ates et al., 2017), a high level of alignment of business units (faculties) to the overarching organisational strategy (Kuipers & Giurge, 2020). Overall, this institution is most akin to what is referred to in the School Effectiveness and School Improvement literature as a 'turnaround school' (Leithwood et al., 2010).

The next chapter presents the main findings from the fourth and final case study. It follows the same pattern as the previous three to achieve structural and thematic consistency across all four findings chapters.

Chapter 7 - Create readiness for change

7.0 Introduction

This chapter presents the main findings from Case Study Four aligned to the research questions guiding this thesis, as with the three previous chapters. The most significant finding at this site was that the reform agenda was expansive and lacked the integration of strategic goals required for optimal impact. A significant contributing factor to this scenario was the highly influential parent body, which had demanded the introduction of the International Baccalaureate [IB], a credential they considered more relevant for global citizenship than the HSC. The Head of School was not passionate about this qualification, but chose to comply, because resistance on the part of his predecessor ended with his removal from office. The Principal's strong commitment to other curriculum reforms led to a packed, yet fragmented agenda, which resulted in some confusion among teachers as to the institution's main strategic priorities. It also resulted in lack of engagement, and change fatigue, on the part of others. The main finding in this case study is that disrupting the status quo to the extent it was in this school, requires careful planning and preparation for change. The lessons that can be learnt from both an overcrowded school improvement agenda, and mismanagement of key stakeholders, represent the contribution of this chapter to the thesis overall.

7.1 Research Question One

What practices are implemented by school leaders to improve the school learning environment?

The practices implemented by the Principal and other leaders to improve the school learning environment, and the processes they consist of, are presented below as sub-headings according to the five major themes that emerged from the data, common to all four case studies.

7.1.1 Establishing a school improvement agenda

The current Principal took office with an ambitious internal reform agenda, in his words "to focus on the core business of teaching and learning" (Principal). When I explored this further, he conceded that teaching and learning had always been prominent, particularly because of high community expectations. His vision centred on shifting the emphasis from results driven education to learning for its intrinsic value based on contemporary teaching methods. He was passionate about motivating students to learn through a revitalised curriculum and engaging pedagogical practices.

Setting a different direction consisted of a curriculum reform package based on four strategic pillars. The main aim was to change tack from a pre-occupation with assessment results, particularly in the HSC, to a love of lifelong learning, in preparation for life after school. This goal was closely connected to his second strategic pillar, the simultaneous introduction of new curricula, namely the IB and the Australian Curriculum. The third strategic pillar was the implementation of a new timetable based on research as to the most effective structure to deliver an engaging curriculum in a secondary school. The fourth and final pillar in the improvement blueprint, was achieving excellence in teaching, underpinned by the NSW Quality Teaching Framework [QTF]. When I asked him to elaborate on what excellent pedagogy in this context would look like, the Principal went on to explain that his ultimate goal was to transform pedagogy so that the curriculum was delivered via contemporary methods and therefore more engaging for students, who would be inspired to learn for the love of knowledge, as opposed to maximising their assessment results and ATAR.

According to the Head of School, his reform initiatives were expected to "drive more consistent academic success and sustainability" (Principal). At least one

participant was confident that the vision for teaching and learning in the School was clearly articulated. "So, it's clear where we are going as a school and as a faculty. What's more, I'm very optimistic about the educational direction of the school. It's not quite embedded everywhere, although it is certainly happening in our faculty. But we're not there yet as a whole school" (Teacher 1). However, as will be seen in subsequent sections, it became apparent during the fieldwork at this institution that the progress of the school improvement agenda was not going according to plan in some instances.

7.1.2 Embedding a learning culture in the school

Transforming the learning culture, from a functional attitude of achieving the highest academic outputs at all costs, to one focused on establishing a lifelong love of learning based on excellence in teaching, was critical to the Principal's reforms. "The culture you set up in the school is really important. You must have a culture that supports the quality of teaching and learning. We do a lot of work in setting cultural expectations for students and teachers, as well as putting systems in place to achieve that" (Principal). Nevertheless, he acknowledged that this endeavour had been challenging due to parental expectations and some resistance from within his own ranks. Despite opposition to his vision, he set about creating a well-ordered culture of learning in the School built on consistent learning routines, protecting learning time by carefully managing disruptions to the normal schedules caused by excursions and faithbased calendar events, as well as maximising time on task during lessons. The persistent tension was that while academic outcomes were highly valued, so too were religious instruction and formation, which often disrupted lessons due to various cocurricular activities. The Principal was attempting to resolve this tension by placing the highest value on learning. Another significant finding in this case study was that

achieving consensus on this matter was an ongoing struggle because parental expectations were not completely synchronised with those of the Principal.

One of the systems implemented to build a supportive learning culture was a new timetable, extending lessons from 45 to 75 minutes, reducing movement of students and teachers during the day, thereby limiting disruption, and increasing lesson productivity. "The four-period day has changed the culture of the school. There's less movement than a seven-period day. There's a calmer atmosphere around the place. There's deep, immersive learning going on" (HOD 1). The learning culture was also changing in relation to student attitudes to learning and achievement. "We've always had academic rigour. We've also had a very competitive culture. That has shifted to competing against yourself and achieving your learning goals, rather than pitching yourself against others. It's a different benchmark. It's more about learning and less about results" (Teacher 5). Another participant commented on shifting attitudes with regard to teachers. "The other cultural change we've had, relates to teachers rather than students. When I first came here, and for many years, professional learning was an added extra. Now it's an essential part of a teacher's life every day" (Teacher 3). The learning culture in the School was showing positive signs of taking hold with both students and teachers, albeit, with further advances to be made on both fronts.

Teacher professional learning also focused explicitly on the concept of culture. "Probably the most valuable professional learning I have been involved in was a research study into the changing nature of school culture, based on the work of Hugh Mackay. Using a combination of questionnaires distributed to students, and small focus group interviews with teachers, we were able to identify a number of features about how the school culture has changed and the contributing factors" (Teacher 4). The

benefits of cultural change for teaching practice were evident to many staff. "The culture in the school is changing. Teachers are becoming more collaborative. They are sharing ideas and resources within the faculty and with other faculties" (Teacher 2). When asked how cultural transformation had been achieved, this participant responded that the SLT had built enthusiasm for the reform agenda to the extent that a critical mass of teachers supported change. The tacit finding here was that teachers were under considerable pressure under the weight of expectation to continually deliver outstanding academic results, leading to a high turnover of staff. They appreciated a change of emphasis where they could focus their expertise and energy on their subject for the love of it, rather than treating it as a means to a quantifiable outcome, in the form of an ATAR.

7.1.3 Leading teaching and learning

The Principal's vision to improve 'core business' was driven by his passion for and experience in instructional leadership. One of the cornerstones of his reform package, was the QTF. It came as a surprise then, that he was not particularly wedded to this framework. The critical point for him was the anticipated coherence it would bring to teaching and learning, as opposed to the historical lack of a pedagogical blueprint at this institution. "It doesn't really matter what quality teaching model you use. What's really important is choosing a model, committing to it, and driving it in your school so that you can deliver the desired outcomes for students. However, we've still got some way to go in terms of quality teaching" (Principal). At the centre of his agenda was improving pedagogy to the highest possible standard. The other crucial issue for him was that teaching and learning needed to be driven not only by the SLT, but especially by HODs, the main instructional leadership team within the organisation. Here, middle

leaders were moving from their historical position as administrators, to instructional leaders, representing an evolution in the role of HODS in the sector (de Nobile, 2018a).

Shared leadership for learning was being driven by a significant investment in the professional learning of all leaders to understand their role in the process. "Appointing a Principal with a vision for teaching and learning has been a major turning point in the school. He has focused the SLT on sustainability of academic achievement. He has focused HODs on becoming leaders of teaching and learning. That wasn't always the case in the time I've been here" (HOD 1). The first stage in the process of leading teaching and learning collaboratively was to unite the SLT in understanding and leading the new vision. The second involved recruiting academically capable and highly qualified HODs who comprehended and accepted their role as leaders of learning rather than managers. This strategy was gradually coming to fruition in terms of effectively leading teaching and learning at a school level.

However, not all middle leaders were enamoured of the changes. Some were critical of the process of implementing the QTF at a school level, pointing to insufficient lead in time and professional learning preceding the delivery of the model. "I don't have a problem with the framework, but it was pushed through too quickly. By that I mean, the way it has been sold, the way it has been given over to teachers, hasn't really helped them utilise it to its full capacity yet" (HOD 2). Another curriculum leader expressed her reservations. "Even though we've had some professional learning, it has been on too broad a scale; it's too big, and it's overwhelming. So, I don't think it's been adopted in some subject areas. It's worked really well in History. They're at the forefront of implementing the QTF" (HOD 3). The History faculty presented their programs at a recent staff meeting and were reportedly leading the charge. However, these data point

to the finding that the uptake and implementation of the QTF were not consistent across all faculties.

One teacher acknowledged that most of the work to introduce the Framework had been done at a faculty level. "We examined the framework at our faculty meetings, discussed the domains and teaching strategies generically, then looked at specific examples relevant to our subject. Then we wrote these strategies into our programs and tried them in the classroom. Teachers then shared their experience of what worked and what did not. That's how we're making the model work" (Teacher 2). This data presents interesting insights into the process of effectively implementing the framework in a particular discipline.

In contrast, other participants were ambivalent about the process. "We've got some teachers who've been 'chalking and talking' for 25 years. So, moving them has been a challenge. Some have embraced the changes and others haven't. Some teachers, and HODs, are flying under the radar. There are some pockets of excellence, and some pockets of resistance" (Teacher 1). According to this participant, there was more transparency and accountability now which resulted in fewer stand-alone teachers operating in closed classrooms in the School. However, the finding that similar mixed views are also evident in the next section on the leadership of change, suggests that the reform agenda was progressing sporadically rather than in a systematic and consistent way as the Principal expected. In this regard, a strategy to motivate the dis-engaged (Chew & Andrews, 2010), and thereby build agency in all teachers, could have potentially produced the desires outcomes in a more timely manner.

A successful project in terms of supporting quality teaching and learning was the introduction of a new timetable, following a three-year consultation period. Its

implementation demonstrated effective practices and processes in terms of leading initiatives relating to improving teaching and learning. First, a steering committee examined the research and made the recommendation to transition to a four-period day. Second, approval by the SLT resulted in the Directors of Curriculum and Professional Learning meeting with HODs to develop an implementation plan. The steering committee concurrently consulted stakeholders and responded to their concerns. Time during whole staff and faculty meetings was allocated to facilitate programming, writing new assessment tasks, creating new scope and sequence schedules, as well as preparing teaching and learning activities to deliver 75-minute lessons. Keeping students engaged in learning for 30 minutes longer in each class, tested the lesson planning and pedagogical skills of teachers. Nonetheless, it was found that most faculties supported the new timetable, and reported that classes were more productive than prior to its introduction.

7.1.4 Leading change

The Principal had embarked on an ambitious reform package which forecast significant and far-reaching change. He articulated his attitude to transformation in this way. "Do the research and the groundwork to bring coherence to change. Then be decisive, commit to the change and see it through despite resistance and setbacks" (Principal). Notwithstanding this strategy, he was acutely aware of the volume of reform implemented by the previous two Heads of School, and the fatigue and resulting antagonism to change among many teachers. In fact, the Principal acknowledged 'unbelievable resistance' from certain pockets of teachers who were reluctant to accept the rationale for change due to the historically high academic performance of the School; "We did not create readiness for change as well as we might have. As a result,

we've had casualties along the way" (Principal). Creating readiness for change is a prominent concept in the change management literature (Kotter, 2012). The acknowledgement that a facilitative environment for change (National College for Leadership of Schools, 2009) was not established, is a very significant revelation and learning for leaders embarking on a substantive school improvement journey.

From the outset, the necessary conditions conducive to the optimal implementation of change, were not in place. It came as no surprise then, that there were 'blockers' on staff. A case in point was the Head of Science who was jaded, cynical and biding his time until retirement. "The more things change the more they stay the same" (HOD 4). He was prepared to rest on his laurels due to a long track record of excellent HSC results in Physics, Chemistry and Biology, as well as successful integration of ICT into the Science curriculum. He candidly admitted to 'flying under the radar' rather than being openly resistant to changing practice. This HOD was not one of the casualties alluded to earlier. This scenario then begged the question, 'Was he going to be challenged at some point, or would the situation be tolerated because of the academic performance of students in the Science faculty?'. The latter seemed to be the reality, as will be explored further at a later point.

Another middle leader acknowledged that the volume of change led to fatigue among his teachers. "My staff are feeling stretched already, just teaching in this particular school. So, implementing a lot of change at the same time, is extremely intense" (HOD 3). The Principal candidly acknowledged that alignment to his vision had been challenging because some staff, particularly late career teachers and the ones who had been at the School for a long period of time, were tethered to the past. The important finding here for leaders is to create readiness for change in an organisation as

a proactive strategy, rather than implementing too much change too quickly, leaving teachers behind. Whilst they may not actively undermine the change agenda, they certainly function as a roadblock to it. A HOD who is a barrier to change is a huge risk to progress, more so than an individual teacher, because an entire faculty can be held back by its leader.

7.1.5 Distributing leadership

The Principal was committed to implementing a distributed or shared leadership for learning model with regard to leading school improvement. "One of the things I have been able to achieve in this role, has been to build a good team of people around me, who are committed to improving teaching and learning" (Principal). Was the Head of Science one of these good people? The question remains unanswered. Whilst the educational direction came from the Principal, instructional leadership within the institution was now expected to be provided in the main by HODs, whose leadership capacity was being built through professional learning opportunities. For example, they had participated in a three-day intensive leadership course facilitated by an AIS consultant. "As a result, they are now willing to go on an instructional leadership journey. This has been a tipping point. Mind you, it took two years to get to this point" (Principal). The impression I gained from several visits to the School, was that shared leadership for learning was a fairly recent phenomenon to which HODs were gradually getting accustomed, as they transitioned from a historical model as managers to the role of leading teaching and learning.

Distributed leadership by the SLT also had its teething problems. The Deputy

Principal was pre-occupied with administrative matters such as the daily operation of
the School. His other main responsibility was managing students with a team of Year

Coordinators. Apart from the Principal, the prominent SLT members driving the reform agenda, were the Directors of Curriculum and Professional Learning. There simply were not enough boots on the ground in terms of leading the reform agenda at school level, in a large institution. Cohesive leadership of the reform agenda by the SLT was a work in progress, particularly given the fact that new roles were not created to lead change, including the broad professional learning of teachers to improve student outcomes.

7.2 Summary of Findings

The Principal embarked on an expansive reform agenda comprising four strategic goals. It included a shift from a focus on maximising assessment results to a passion for learning for its intrinsic value. It also consisted of the implementation of new curricula, the IB, and Australian Curriculum, underpinned by the QTF. A new timetable structure to deliver the curriculum was also developed and introduced.

Nevertheless, the main objective was the transformation of pedagogy to drive learner engagement. The significant findings from this site were that the scale of the reforms lacked coherence which led to adverse implications. The overcrowded agenda contributed to uncertainty among teachers as to where to focus their energy, in terms of priority and volume. As a result, setbacks such as change fatigue and pockets of resistance on the part of some teachers, were slowing the progress of school improvement. Advances on this front were also hampered by the inability to manage negative group dynamics (Chew & Andrews, 2010).

The source of the problem could be traced to the leadership approach of the Principal. The influential parent body demanded the implementation of the IB, which was not fully supported by the Head of School. He considered it unwise to resist this group, so he acquiesced to their pressures, keeping them at arm's length rather than

engaging with them as partners in the process of educating students. The lack of a parent engagement strategy, exacerbating an already precarious dynamic, excluded a major stakeholder group from a reform agenda which had become unwieldy. It pointed to a finding extrapolated from the data, rather than explicitly discussed. That is, the Principal failed to fully read and respond astutely to his context.

Another of his miscalculations, as he acknowledged, was not creating readiness for change. As a result, many teachers were overwhelmed by the volume and rate of change. An additional factor, not in his favour, was the limited SLT personnel available to support him in leading school improvement. Momentum for school improvement was also constrained by HODs who were in the process of adjusting to their new role as leaders of learning. Some, as discussed, were passively resistant to change.

Despite the above difficulties, the Principal was able to record some victories in the battle for school improvement. His mantra that a commitment to a love of lifelong learning must be the highest priority in the School, had widespread support from teachers. Broadly speaking, the IB and Australian curriculum were implemented to good effect. The introduction of the new timetable was well received by teachers and students. Greater engagement in learning to achieve one's personal best was evident to the staff. Additionally, the Head of School had successfully shifted the attitude to professional learning to the point that a critical mass of teachers engaged positively in sustained professional learning. A collaborative culture within and between faculties, was also evident in the institution.

These key performance indicators suggest that on an instructional level, the organisation was making progress, albeit slower than anticipated by the architect of the agenda. With regard to the main theoretical assumption underpinning this thesis, a

significant finding was the importance of transformational leadership in laying the groundwork when undertaking substantial instructional reforms. The capacity to respond to the context in which one leads, the ability to engage all stakeholders in a common enterprise, and motivate them to rally to the cause, were not given the credence they deserve in this case study, to the detriment of school improvement and the people it is designed to benefit. This scenario emphasised the importance of simultaneously implementing both instructional and transformational leadership practices in an integrated and complimentary way, rather than relying on the former almost exclusively. Instructional and transformational leadership are insufficient in and of themselves to promote school improvement (Day et al., 2016). Synergy between them is required to achieve school improvement.

7.3 Research Question Two

What practices are implemented by faculty leaders to improve the faculty learning environment?

The practices implemented by middle leaders to improve the faculty learning environment and the processes they include, are presented below as sub-headings according to the five qualitative characteristics in the DMEE (Creemers & Kyriakides, 2008), as outlined in Chapter 2. In this context, the formal faculty leadership team consisted of the Head of Department and Assistant Head. This team represented shared leadership for learning at a faculty level. Less formally, senior teachers also contributed to the leadership of the department.

7.3.1 Developing effective teaching

Several common practices implemented across faculties to improve pedagogy, emerged from participant interviews. Implementing the QTF appeared to be the highest priority for middle leaders. "Embedding the QTF in all programs so that it is the

normative practice of all teachers, is our main goal" (HOD 1). Personalising the learning for all students was another important aim. "We've been doing the slog work of differentiation to cater for learning in Year 7-12 in a four-period day. This has forced teachers to plan and deliver engaging lessons to meet the needs of all learners" (HOD 3). The focus in the English Department was integrating the QTF into programs, which required upskilling teachers in differentiating the curriculum (Teacher 1). The process that led to effectively personalising the curriculum for all students involved sharing resources and best practice at the faculty level, including creating documents such as exemplar programs and assessment tasks.

The PDHPE Faculty, under the guidance of the HOD and his Assistant, wrote programs collaboratively, embedding the language of the framework in teaching and learning activities. These programs were then modelled at a staff development day where each department was required to share examples of best practice (Teacher 2). Writing programs and assessment tasks in teams, was also a feature of faculty meetings in HSIE (Teacher 4). In the Technology Department, the HOD allocated time in faculty meetings to explore the international research on different pedagogies, with an emphasis on improving the writing skills of students, particularly their ability to analyse and answer questions, especially extended responses (Teacher 5). It is evident from these data that departments were collaborating in PLCs to improve pedagogy, albeit in different areas and using varied strategies. The professional learning culture in most faculties was reportedly boosted by the school wide strategic goal to enhance teaching and learning.

Analysing data to inform teaching and learning was also an important practice in each department. Many middle leaders constantly worked with teachers during non-

class time to build their capacity to analyse assessment data to plan teaching and learning activities (HOD 1). Supporting NSTs to improve their pedagogical practice was another common process evident across several faculties. Working with NSTs tended to focus on curriculum rather than classroom management. It included differentiating the curriculum and developing strategies to engage students in learning to make them passionate about a subject [Religious Studies], they were not necessarily interested in (HOD 2). In the English Department, NSTs underwent an induction program. Pursuant to that, they received ongoing one-to-one support from the HOD and Assistant, as well as the Director of Professional Learning (Teacher 2). They attended mentor meetings where they engaged in lesson planning. Their lessons were observed and they subsequently received feedback, as well as encouragement and support to attend externally delivered professional development activities.

Despite substantial progress in teacher effectiveness in some quarters, resistance to changing practice existed in others. A case in point was one HOD, already discussed, for whom retirement was imminent. By his own admission, there was no imperative to change his practice (HOD 4). Similarly, a late career teacher in HSIE, who had achieved historically high HSC results, was letting the changes wash over her due to the perceived absence of accountability beyond student achievement in public examinations (Teacher 3). There was no performance review apparatus for classroom teachers at that point in time, which allowed some to operate as they had always done. These data indicated that shifting the pedagogy of some teachers was an ongoing challenge. Again, the finding here was that intractability to change was tolerated in the case of capable teachers, measured by the performance of their students, usually in external examinations such as the HSC.

7.3.2 Allocating resources to support teaching and learning

A finding that emerged from the data was that each faculty leadership team had a substantial budget at its disposal to improve teaching and learning, contributing to gains in this strategic goal. "The College is very generous in supporting the professional learning of teachers" (HOD 3). One participant articulated the purpose of this strategy. "We have to align the faculty to where we're going as a school. So, we take a coordinated approach to professional learning to achieve faculty goals" (HOD 2). Faculty leaders explained where they allocated funds to support teaching and learning, thereby aligning their department to the direction of the School. It was common practice for teachers to be given release from face-to-face teaching to undertake action research aimed at improving pedagogy, or team teach with peers. AIS consultants were frequently brought on site to support the faculty leadership team with leading learning through processes such as programming and aligning teaching practice to the QTF. External HSC markers were also regularly contracted to work with teachers at faculty meetings to grade assessment tasks, replicating the HSC marking operation. The generous budget was reportedly contributing to improvements in teaching and learning.

7.3.3 Developing positive attitudes to learning in students

To re-iterate, the first strategic school improvement goal was to engender in students a love of lifelong learning as opposed to a narrow emphasis on achieving high academic results. "We want students to be passionate about learning and cherish it for its intrinsic value" (HOD 1). "We constantly tell them to own their learning by being proactive and engaged learners, to set goals and hold themselves accountable for their learning" (HOD 2). During several site visits and classroom observations, I certainly witnessed students being acknowledged for their application to learning rather than

high achievement exclusively. Nevertheless, some HODs and teachers, expressed reservations about the extent to which this goal was being achieved across the School.

According to one curriculum leader, students in Year 11 and 12 were maintaining historic attitudes to achieving a high ATAR. "Students want results driven education in Stage 6, both at school and outside. Internally, they want to know what they have to do to get high marks. Externally, they go to tutors for HSC 'drill-and-practice' type learning. This is all driven by demand for high performance in the HSC. So, they don't own their learning" (HOD 2). By contrast, the teaching and learning in Year 7-10 was reportedly very different. "There's quality teaching there. There's amazing learning there. It's not teaching and learning for results like in Year 11 and 12. There's such a disconnect between the junior school and the senior school. The students are achieving great marks in the HSC, but are they really learning?" (HOD 2). The tension between learning for its intrinsic value and parental pressure to achieve high results, was tangible, and as yet unresolved. A major contributing factor to this scenario, as noted previously, was that high performing teachers were given a good deal of latitude for not embracing change with regard to modernising their pedagogical practices, due to the track record of their students in the HSC.

The Head of Religious Studies explained the disconnect between the junior and high school, and its impact on teachers. "Senior students are learning to do well in exams. They are playing the game directed by parents. That's the push-and-pull environment we're working in; you're torn between quality teaching on the one hand and producing good HSC results on the other" (HOD 2). Similar views were expressed by another middle leader. "So, as an educator you're caught between a rock and a hard place. You want the passion for learning, which you get in the junior school, but not in

the senior school. It's hard to reconcile the two approaches" (HOD 3). This tension, in their view, was not going to be reconciled easily due to parental expectations.

To elaborate, they described a scenario in the junior school where quality teaching and a love of learning were occurring. The Heritage Project in Year 7, consisted of an integrated curriculum project combining History, Music, Art, English and Geography. Students were required to research and record their cultural background, present the information multi-modally to an audience, and reflect on their learning in a journal. According to one participant, a high level of student engagement was observed throughout the project, followed by very positive evaluation of their learning. "They are so eager to learn, especially new things" (HOD 3). Similarly, according to the Head of Performing Arts, teachers had effectively embedded the QTF in the delivery of the curriculum in Year 7-10 and effectively immersed students in the learning process. Perhaps, it was suggested by participants, when these junior students progressed into the senior school, their attitude to learning would not be tainted by the pressure to perform well in the HSC.

7.3.4 Managing student attendance and behaviour

According to its MySchool website, student attendance was 95% due to high parental expectations. Therefore, it was identified as a 'non-issue' by the Principal. However, he did acknowledge that punctuality could improve because some junior students were tardy getting to class and occasionally distracted during lessons. "This issue is less problematic in the senior school because students are more mature. They are highly motivated to achieve. It's more of an issue in the junior school; not so much in Year 7 and 8; more so in Year 9 and 10, where they become somewhat disengaged from learning" (HOD 4). The four-period timetable with less movement during the day,

reportedly alleviated this issue to an extent. On the other hand, according to one middle leader, "there was some distraction to teaching and learning from inappropriate student conduct" (HOD 1). Another faculty leader commented on this pattern of behaviour. "NSTs and those teachers new to the school get tested by junior students. We expect them to be switched on in class. In fact, we now demand that of them. Teaching and learning in this school are extremely intense. The demands on students are immense. They're not going to cope if they're lagging in class" (HOD 2). As a result, HODs and their Assistants were strategically targeting the behaviour of junior students in lessons, to improve the learning culture.

To this end, the faculty leadership team encouraged teachers to take control of the classroom environment, structure lessons tightly, state high expectations of students, and constantly monitor their behaviour and time on task. Faculty leaders, when not teaching, were constantly scrutinising the conduct of junior students by conducting regular walkthroughs and challenging inappropriate behaviour where required. An interesting paradox emerged that junior students were less disciplined than their senior counterparts, but more engaged in learning for all the right reasons.

7.3.5 Engaging parents in the learning agenda

The importance of meeting parental expectations was impressed upon middle leaders by the SLT. "Parents pay high fees. They have high expectations. So, we have a high level of accountability to them" (HOD 1). Each faculty was required to communicate to parents via the school newsletter about the changes occurring within each department in relation to the implementation of the IB, Australian Curriculum and QTF. At information evenings, HODs were required to deliver presentations aimed at assisting parents to comprehend the content and language of the new curricula, as well

as methods of assessment data collection and their use to inform teaching practice.

They also explained the cultural changes implemented, relating to expectations of student learning. An interesting finding here was that while faculty leaders were engaging with the community, they appeared to be doing so in the absence of an overarching school level parent engagement strategy, the reasons for which have already been discussed.

The rationale for implementing a new timetable and the research supporting this, were also communicated to parents. Informing them of the new approach to managing punctuality and behaviour in class was another topic of conversation. "We receive lots of parent feedback, solicited and unsolicited" (HOD 4). Parent satisfaction surveys were regularly administered and were the main source of feedback sought. They indicated that parents were voting with their feet by keeping their children in the School because of its religious ethos combined with high academic performance.

7.4 Summary of Findings

At this site, HODs and their Assistant formed the leadership team, responsible for improving the faculty learning environment. The first port of call was to implement the IB, as well as new Australian Curriculum. To this end teacher collaboration in PLCs to embed the QTF in pedagogy was contributing to enhancing teaching and learning.

Additionally, a greater level of dialogue about pedagogy, in particular the sharing of practice within and between departments, was reported by participants and observed by me in whole staff and faculty meetings. These were positive signs that the professional learning culture in the School was improving.

An important finding at this site was that the teachers were struggling to resolve the tension between a love of learning for its intrinsic value and parental demand for high academic performance. The pressure to perform was more apparent in the functional attitude to learning of students in Year 11 and 12. By contrast, students in Year 7-10 were more inspired by their learning. Paradoxically, in relation to managing student behaviour, senior students were much more focused on their learning and therefore less distracted in lessons compared to their junior counterparts. The conduct of students in the junior school needed to be challenged by establishing clear expectations about appropriate classroom conduct. Nevertheless, the introduction of a new timetable was assisting in the management of junior student punctuality and increasing their time on task during lessons.

Observation of classes during site visits indicated that students were highly engaged in their learning. A new timetable may have contributed to this scenario in terms of a more settled learning environment. It may be due in larger part to the commitment of a critical mass of teachers to improving their pedagogy. Many were also working hard to enhance the learning culture by making the curriculum more engaging. For instance, they were collaborating with their peers to analyse data to inform the next stage of learning. They were also striving to create more relevant and meaningful assessment tasks. Relief from face-to-face teaching to develop their pedagogy was an effective process in this regard. This was part of an overall strategy to improve the faculty learning environment and develop teachers, supported by substantial financial resources readily available in a high fee-paying school.

Another significant finding was in relation to parent engagement, a vexed issue for the Principal and his staff. This was possibly attributable to the expectations placed upon the School as a result of its historic academic performance and the huge financial investment in it by the parent body. Perhaps a contributing factor was the scale of the

reform and the need for a longer timeframe to digest all the changes occurring in what was once considered a fixed state of affairs, with no valid rationale for transformation of the curriculum, despite parents demanding the introduction of the IB. At any rate, in the absence of an institutional parent engagement strategy, the faculty leadership team was making every effort to inform the community about the changes to curricula, teaching and learning.

7.5 Research Question Three

What practices are implemented by school and faculty leaders to align the faculty learning environment to the school learning environment?

The practices implemented to align each faculty to the overall direction of the College, were occurring through processes at both a school and faculty level. These leadership practices and the processes they consist of, are discussed below.

The Principal explained that at a school level, professional learning to familiarise all teachers with the QTF was undertaken at staff development days. This process involved a three-part format on each of the days allocated to professional learning. In the first session, one of the three domains of the framework would be critically examined with the assistance of an external facilitator. In the next session, each faculty would meet to discuss the practical implications of that domain for their particular subject area. This discussion would be followed by developing teaching and learning activities for inclusion in programs. The final session of the day involved HODs and their Assistant, sharing strategies with all teachers in an open forum. On the next available staff development day, the second and third domains of the QTF were examined, and so the cycle continued.

Additionally, at a school level, the Directors of Curriculum and Professional

Learning conducted individual meetings with each HOD to review and approve faculty

goals aligned to the main pillars in the strategic plan (HOD 1). The Principal explained that following the approval of faculty objectives, an internal monitoring process was introduced by the SLT, to ensure ongoing compliance to the College blueprint. This practice was found to be effective in aligning faculties to the school learning environment. A contributing factor to this alignment was the system of fortnightly curriculum meetings, at which HODs were required to make a presentation to their peers, sharing examples of the effective implementation of the QTF in their own faculty. For instance, they explained the strategies involved in differentiating the curriculum or using assessment data to inform teaching practice. They would also outline for example, how they used research from scholars such as Hattie, Robinson, Timperley, and others, to improve pedagogy.

HODs were using the QTF at faculty level to have individual conversations with teachers about their progress in relation to embedding the framework in their teaching practice. "They assist staff to see whether their practice aligns with what we want to achieve here. That's one of the benefits of having an explicitly articulated model. It makes clear the type of teaching and learning we value" (Principal). Discussion of pedagogy and learning styles was a regular agenda item at faculty meetings. "I see my role as aligning the big dots, mainly creating a learning culture and delivering professional learning in my faculty to facilitate the curriculum changes that are happening across the school" (HOD 1). As another middle leader (HOD 3) outlined, she saw her role in terms of being a leader of learning, synchronising her faculty with developments at a school level. One of her peers (HOD 2) also saw himself in this light, as an instructional leader, rather than an administrator. This represented an important

development in the institution in terms of shifting the faculty leadership team from an administrative role to leaders of learning.

In this vein, the above-mentioned Head (HOD 2) developed a pilot program with embedded quality teaching strategies, specific to his faculty. The program was 'road tested', then evaluated, amended, and implemented in all programs in the faculty. This project was presented at a curriculum meeting and acknowledged as a work in progress. One participant (Teacher 3) stated that the History Department had been taking ownership of the agenda because they have authentic teacher engagement at a faculty level. For instance, they were deeply committed to inducting and supporting NSTs to adopt the QTF in their practice. To this end, she recalled a faculty meeting in which experienced teachers shared with their junior colleagues, strategies on embedding the QTF in teaching and learning. This sharing of practice was followed by question-and-answer time, followed by reflection, which novice teachers (Hattie, 2009) in particular, reported as valuable.

In addition to the ongoing professional dialogue about the QTF at faculty level, another useful strategy was the constant discussion of the Australian Professional Standards for Teachers [APST] Framework, to ensure currency of teaching practice (HOD 3). As one respondent stated, "There's certainty and confidence in my department about where we are going and how we're improving practice" (Teacher 1). Teachers were continuously encouraged to undertake professional development to meet NESA accreditation requirements at the level of Proficient Teacher, which became mandatory from 1st January 2018. They were also encouraged to access voluntary higher levels of accreditation at Highly Accomplished and Lead Teacher (HOD 2). However, contrary

points of view and reservations about the direction of the School were raised by other participants. Some HODs were forthright in raising concerns about the reform agenda.

One middle leader acknowledged that alignment of staff to the reform agenda had posed a challenge for the SLT. "The QTF is spoken about all the time, but it's not widely embedded in teaching practice across the school at this point in time. A lot of senior teachers in the school haven't changed their practice. They are continuing to teach as they have done for many, many years. They continue to do what works for them" (HOD 2). Other reasons were offered as to why all teachers were not accepting of the changes introduced. "There has been some resistance to the new direction the school is taking. 'Ball and chain' stuff in a couple of cases. 'Why change something that is working well?' was the sentiment there" (HOD 1). Resistance to change on the part of some teachers was commented on further. "There's a sense that there has been a lot of change in recent years. The IB was implemented at the same time as the Australian Curriculum and QTF and new timetable. So, teachers are feeling a little overwhelmed with all the changes" (HOD 3). Resistance to the rationale for change and its sheer volume were suggested as significant factors in the lack of universal teacher engagement. A significant finding in relation to this phenomenon was discussed previously in terms of a revelation by the Principal that organisational readiness for change was not undertaken to the extent required in preparation for implementing comprehensive school improvement reforms.

Despite the comments from the Principal noted earlier, a lack of explicit direction from the SLT with regard to the introduction of the QTF, was alluded to as a potential problem. "So, my faculty is implementing the QTF, but we're operating a little in the dark. My staff are saying, 'We're happy to do it, but you just need to show me

what to do'. I would like more direction and guidance from the SLT about where I'm meant to be taking this framework" (HOD 2). Ongoing support for middle leaders was identified as a future need in taking this framework forward. "My concern is that the SLT did not provide HODs with a model program with embedded quality teaching strategies. So, we developed our own. I've used faculty meetings as a workshop to look at ways to embed quality teaching strategies in our subject" (HOD 3). These serious reservations raised by curriculum leaders point to dissonance between the theory of leading curriculum change at a school level and its practical implementation at the faculty level where instructional leadership is at the forefront in secondary schools.

One middle leader, who candidly admitted to not embracing the changes occurring across the school, questioned the validity of the QTF as a viable curriculum model. "My concern is that the QTF was developed by the Department of Education and is getting older. It's not the right thing to introduce in an independent school that is also implementing the IB and Australian Curriculum. It's not an easy beast to attack. The QTF does not necessarily fit easily with the key competencies in the Australian Curriculum" (HOD 4). One of the findings in this case study was that middle leaders were facing the dilemma of aligning their faculty to a school improvement agenda, the merits of which they were not entirely convinced. This institution lacked a singular, cohesive fit-for-purpose, curriculum framework. As a result, teachers were grappling with a three-headed beast, an international curriculum, a national one, and a state-based teaching framework, none of which were seamlessly integrated. Add a new timetable to the mix, and the complexities teachers were dealing with on a daily basis become abundantly clear.

7.6 Summary of Findings

Leadership practices were implemented at an organisational and departmental level to achieve alignment of each faculty to the school learning environment. The main strategy, under the guidance of the Directors of Curriculum and Professional Learning, was to allocate staff development days to build the instructional capacity of teachers to deliver the QTF. The Directors also worked with HODs at curriculum meetings to share resources and ideas about effective pedagogy. This professional learning was shifting the faculty leadership team in the direction of becoming leaders of learning. In this vein, they used faculty meetings effectively to sustain dialogue about the QTF and provide teachers with the opportunity to adopt best practice. HODs and their Assistant also conducted mentoring sessions with less experienced teachers to improve their practice.

Whilst gains were made in disseminating best practice across the School to improve pedagogy, some middle leaders expressed concerns about the overall progress of strategic goals. Two common reservations were raised by HODs. In the first instance, some teachers, including middle leaders, were not heeding the call to change their pedagogy. Second, and connected to the previous concern, was the sheer volume and pace of change that many found overwhelming. Overall, greater readiness for change needed to be created in the institution prior to launching widespread reforms.

Additional human resources could have been allocated to the SLT to lay a stronger platform for reform, within a shared leadership for learning model.

7.7 Research Question Four

What practices are implemented by school and faculty leaders to improve teacher effectiveness?

The practices implemented to build instructional capacity and those with designated responsibility for them, along with the processes therein, are explored in

this section. In short, it was found that a range of professional learning strategies targeted at developing instructional quality, was implemented at different levels: whole school, faculty, and individual teachers.

The philosophy underlying instructional capacity building to achieve strategic goals was outlined by the Head of School. "Professional learning bridges the gap between what we aspire to, our vision, and what we are doing currently" (Principal). Closing the gap comprised a two-pronged strategy of building agency in both middle leaders and teachers. The first port of call was working with middle leaders to improve instructional leadership at a faculty level. "The leading for learning approach by HODs has been critical in achieving sustainability of high academic achievement" (Principal). To support them in this endeavour, the College adopted Appretio, the AIS developed self-appraisal model based on the AITSL Framework, combining Accomplished and Lead Teacher level programs for middle leaders. It consisted of a three-year cyclical review process for HODs to build instructional leadership capacity. It also served as a mechanism to secure teacher engagement based on the appropriate modelling provided by middle leaders. Leadership succession planning was catered for by the introduction of a newly created voluntary Aspiring Leaders Program involving approximately 20 emerging leaders, run by the Director of Professional Learning.

Annual staff development days played a central role in the professional learning of middle leaders and teachers. Under the current regime, the days were increased from four to six, with each addressing one of the main pillars in the Strategic Plan. Innovation was also a feature of these events as one middle leader explained (HOD 1). One such initiative was the introduction of the 'Festival of Dangerous Ideas'. Teachers were invited to deliver a presentation on innovative practices in their classroom, such as the

implementation of the QTF or the integration of technology in teaching and learning.

Another was a session where a panel of students provided feedback about their learning in relation to the QTF or technology-based lessons, to teachers collectively.

Beyond staff development days, the Principal introduced new professional learning requirements. First, external professional development events had to be aligned to school strategic priorities in order for teacher attendance at them to be approved. Second, it was mandatory for all teachers to self-select two professional development activities per year. One had to be related to curriculum content in their chosen subject. The other was required to address pedagogy, technology, or leadership training. Third, all teachers were required to share their learning at faculty or curriculum meetings following their attendance at a particular course. "So, they are not participating in a one-size-fits-all approach to professional learning. Our Director of Professional Learning differentiates the learning for teachers, so we've got a much greater uptake of professional learning since we started this approach" (Principal). Additionally, teachers were encouraged to avail themselves of other professional learning opportunities such as post-graduate study, writing papers on curriculum and pedagogy in professional publications such as the English Teachers' Association Journal, and presenting at conferences. They were also supported to join relevant disciplinespecific bodies and establish their own professional networks. As discussed previously, the commitment to professional learning as the mechanism to achieve excellence in teaching and learning was supported by a generous budget.

A substantial ongoing investment in professional learning was required to deliver the IB, both the Diploma and Middle Years Program, due to the tight regulation that is at the core of delivering this credential. "Before we could deliver the IB here, we

signed up teachers to five days of professional development to understand the curriculum that underpins the program, as well as the teaching and learning strategies that work best to support that program" (Principal). Pre- and post-delivery professional learning requirements had to be met in order for the school and individual faculties to deliver the IB programs. 12 months later the same teachers were required to undergo a further three days training in specific areas of this curriculum such as inquiry-based learning and criterion-based assessment.

A similar approach was taken to the implementation of the QTF. Prior to its introduction, staff development days were allocated to familiarising teachers with the framework and upskilling them to deliver the three domains. "After this exercise, the English Faculty is at the vanguard of implementing the QTF in this school. We're not just 'talking the talk'. We're actually collaboratively embedding the framework in our programs" (Teacher 2). One curriculum leader made the following observation about preparation to deliver the QTF. "The most useful professional learning has been on differentiation" (HOD 2). Another very practical activity during the implementation of the QTF, was modelling programs at the most recent staff development day, which I observed, where each faculty was required to share examples of best practice.

Despite acknowledgment from participants that "The Principal brought a coordinated approach and a level of coherence to professional learning here" (HOD 1) and the School made available a "generous professional learning budget to enable faculties and teachers to embed the QTF in their pedagogy" (Teacher 1), others expressed reservations. "Some programs have been implemented with little or no ownership from the classroom teachers who were expected to implement them. There were no clear objectives as to what the programs were expected to achieve. They were

not subjected to meaningful evaluation" (Teacher 4). This data would suggest that some reforms were ushered in quickly without widespread consultation and the support of all teachers, hence the lack of ownership on the part of some. Nevertheless, whilst teachers were at different stages of improving their practice, the general consensus seemed to be that improving pedagogy through sustained professional learning was a strategic priority that was well supported by most curriculum leaders and staff.

7.8 Summary of Findings

This institution identified the development of effective teaching as a strategic priority to improve learning. It allocated substantial financial resources to facilitate teacher professional learning at all levels: school, faculty and individual, as the main process to enhance pedagogy. The Directors of Curriculum and Professional learning were actively leading this agenda at an organisational level. Innovation was encouraged and evident in initiatives such as the *Festival of Dangerous Ideas*, held during staff development days.

At a faculty level, building the instructional leadership capacity of HODs was the first port of call, in relation to professional learning. The Appretio model developed by the AIS was utilised to develop the 'leadership for learning' capabilities of middle leaders. They then took the lead in building the instructional capacity of their teachers at staff development days and faculty meetings. At an individual level, a commitment to teacher professional learning activities delivered by external consultants, was a feature of this institution. The main finding in relation to developing teacher agency was that building instructional capacity was less cohesive and effective, than it potentially could have been, because it was targeting the implementation of the IB, new Australian Curriculum, QTF, and new timetable structure, which teachers were finding challenging

due to the scale and pace of reforms, combined with a lack of organisational readiness for change.

7.9 Conclusion

The main finding in this case study was that the comprehensive nature of the school improvement agenda lacked the level of integration and coherence required for optimal impact. The implementation of three major curriculum reforms: the IB, Australian Curriculum, QTF, as well as the development of a new timetable structure to deliver them, within a condensed timeframe of three years, produced challenges on many fronts. By the Principal's own admission, the lack of readiness for change in the organisation, meant the volume and pace of reforms were overwhelming for some middle leaders and teachers.

Preparation for change, needed to include the appointment of additional SLT members to share leadership for learning. A school level parent engagement strategy would also have provided added stakeholder engagement, and potentially impetus to the reform agenda. Furthermore, a strategy to motivate and engage all teachers, or at least one to manage the less enthusiastic, could have possibly alleviated some of the resistance by members of this group. Nevertheless, there are many lessons to be learnt here, particularly for leaders planning school improvement on a significant scale. The main take-away message is that creating readiness for change is a crucial pre-requisite to school improvement, which must be proportionate to the level of disruption to the status quo caused in the institution. The greater the scale of reform, the more preparation for change required.

Despite the sporadic achievement of strategic goals, many gains were also made.

Most HODs had accepted their new role as instructional leaders and were guiding their

faculty accordingly. A critical mass of teachers was embracing professional learning opportunities and taking great strides forward in terms of enhancing their pedagogy. Widespread endorsement of the new timetable was evident, along with acknowledgement that the learning culture of the School was improving. Community engagement at a faculty level was also proceeding well, as demonstrated by parent support for the Heritage Project and information evenings. Overall, the report card for this institution records satisfactory progress with room for improvement in some areas.

Chapter 8 will present an over-arching comparison of all four case studies and discuss the main findings in relation to the School Effectiveness and School Improvement literature. The contribution of this thesis to the gaps in the field will be examined throughout the chapter.

Chapter 8 - Four factor focus

8.0 Introduction

Chapters 4 to 7 presented the main findings from each case study in relation to how leaders improved the school learning environment and teaching in their respective context. The case studies confirmed the findings in the School Effectiveness and School Improvement Literature, that school leaders draw on the same set of leadership practices (Leithwood & Mascall, 2008) and follow similar collaborative methods (Hallinger & Heck, 2011b), in pursuit of reform. They also demonstrated that both transformational and instructional leadership practices are required for school improvement (Marks & Printy, 2003). Nevertheless, it was shown that the various practices implemented at different times, were shaped by contextual factors such as the Principal's relationship with the Board, parental expectations, and the willingness of teachers to support and implement change. These variables were distinct in each of the case study schools, and informed the decisions made by the Head of School regarding the approach selected to achieve internal reform. Therefore, the findings also confirmed the main theoretical assumption underpinning this thesis, that effective school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to enhance the school learning environment and improve teaching.

This chapter presents a critical discussion of the meta-themes that emerged from the findings: negotiating contextual dynamics to plan and implement reform, developing a coalition to drive instructional capacity building, aligning key stakeholders to the reform agenda, and building academic culture to facilitate change. These meta-themes were integrated to form a four factor model of school improvement. In this

chapter, I argue that this framework is significant for four reasons. First, it sheds light on critical internal factors in the case studies that were harnessed to facilitate reform. Second, it emphasises the strategic decisions school leaders made in each of these dimensions to build improvement momentum. Third, it shows how leadership influence was mediated through people and school conditions. Finally, the processes that underpin effective leadership, often overlooked in the literature (Muijs, Reynolds & Kyriakides, 2016), were clearly brought to bear. I also argue that the four factors are collectively required in varying contextual degrees, to contribute to school improvement.

This chapter will discuss each of these factors in turn, followed by a summary of the argument and significance of this thesis in relation to the above model. The new knowledge contributed by this study will be sprinkled throughout the chapter and explained in detail in the next. Essentially, the contribution of this thesis focuses on the context specific leadership practices and processes that make a positive difference to the school learning environment and effective teaching, as well as how leadership influence is mediated through people and processes at multiple levels of a school.

8.1 Negotiating contextual dynamics to plan and implement reform

Context refers to features of the broader organisational and environmental setting within which the school and principal are located (Clarke & O'Donoghue, 2016). As examined in Chapter 2, Coleman et al.'s (1966) prominent study argued that internal school context did not impact student learning outcomes. Subsequent School Effectiveness and School Improvement literature refuted this claim, arguing that contextual factors could be influenced to make a positive difference to student learning (Creemers et al., 2013; Hallinger, 2018; Hopkins, 2013). Whilst this research tradition

shows that leadership occurs within a multi-layered context (Gu & Johansson, 2013), a lack of agreement as to the precise nature of the relationship between context and leadership, persists (Bascia, 2014; Burak, 2018).

I argue that context does matter by pointing to the complex relationship between context and leadership, to demonstrate how effective leaders in three case study schools skilfully negotiated contextual dynamics to contribute to school improvement. I use an outlier case study to demonstrate the implications of neglecting to read and respond astutely to context. The significance of this thesis is that it emphasises to school leaders the importance of understanding local contextual complexity (Thrupp & Lupton, 2011), and adapting to it (Hallinger, 2009) by customising school improvement strategies to that specific setting, rather than adopting a 'one size fits all' approach (Bush, 2018: Reynolds et al., 2016). The contribution of my thesis in this regard is the detailed insights it offers into how to respond to context in effectively leading internally driven reform.

To elaborate, one of the key findings of this thesis is that a high level of contextual literacy, the capacity to navigate context (Schein, 2015), is required to improve a school. This was evident in the first three case studies, where the Principal demonstrated deep knowledge of their context, the community they serve, and the nature of the challenges they face (Chew & Andrews, 2010). As a result, they responded appropriately to the demands of their context (Leithwood, Sun & Schumacker, 2020) and customised their strategic plan accordingly. In contrast, the fourth Head of School neglected to engage adequately with the Board, the parent body collectively, and pockets of teachers resistant to the change agenda. He subsequently experienced setbacks in his reform efforts. Interestingly, all four Heads of School had been Deputy

Principal in the same institution prior to their appointment as Principal. The finding here was that internal appointments do not guarantee successful school improvement in and of themselves. That depends to a significant extent on the capacity of the Head of School to understand the evolving needs of their community (Conway, 2015) and respond appropriately to their specific context. The skills and subtleties involved in constructively negotiating contextual dynamics to plan and implement reform, will be examined in relation to the first three case studies. The fourth demonstrates the pitfalls encountered due to the inability to prudently navigate context.

The Head of School in Case Study One, as a consequence of a long period of service at her institution, including a stint as Deputy Principal, was respectful of the Board directive to lift the academic performance of the institution, and cognisant of the appetite for innovation among her teachers, including their capacity to introduce pedagogical change. She acknowledged in her interview that this awareness led to the development of a highly integrated strategy, in terms of a singular focus on the implementation of the fit-for-purpose AFL Framework, to enhance teaching and learning, the main pillar in the strategic plan, based on the most important need in that context. All internal systems and structures were subsequently aligned to the achievement of this particular goal, a distinctive feature of this organisation in comparison to the others. "For the first time, we have a direction of where we are going with teaching and learning" (HOD 1). As explained in Chapter Four, this singular direction appeared to galvanise the reform agenda, which contributed to strong synergy in relation to new staff appointments, formation of the Research Team, and professional learning activities at both a school and faculty level. According to the Principal, this

synchronicity, corroborated by several research participants, contributed in turn to focusing teachers on the core business of improving teaching and learning.

The Principal was mindful that teachers required additional support to develop their instructional capacity, which led to the appointment of a pedagogical expert, the new Deputy Principal. The Research Team, another unique feature of this institution, was established to assist teachers to enhance their pedagogical practice. The Principal explained that establishing an inter-disciplinary steering committee to disseminate research on global best practice pedagogy, was important in adding legitimacy to her agenda, assisting teacher engagement across all faculties. For example, one middle leader outlined that the support of this guiding coalition was making a positive difference to instructional practice. "We are trying new assessment approaches and methodologies suggested by the Research Team" (HOD 4). The Principal acknowledged in her interview that this Team, with its pedagogical expertise and credibility, was able to enhance pedagogy by working alongside teachers at a faculty and classroom level.

Whilst gaining a mandate from the Board and subsequent strategic planning of school improvement was evident in all case studies, this site demonstrated that the more sensitive reform was to context, and the more cohesive the agenda, the more likely it was to gain traction in the organisation by securing the support of key stakeholders. In this institution, teachers seemed to respond positively to a consultative and collaborative approach to improving teaching by accepting ownership of and accountability for the agenda. The Head of School acknowledged the effectiveness of this method as noted in Chapter 4. Whilst the Board demanded change, the educational direction of the School and the blueprint to achieve it were set by the Principal, a common finding in the literature (Leithwood & Riehl, 2003).

A high level of contextual literacy is also evident in the next two cases. In Case Study Two, the Head of School gained intimate knowledge of her context and valuable insights into how to lead her community, as a result of a decade of service in the same institution. During her interview she stated, "Context is everything. You have to take a good look at your context before you do anything. I know this school and how it works. So, context is critical. You've got to make change really carefully" (Principal). Her capacity to effectively negotiate contextual dynamics is demonstrated in the following example. In her first year as Principal, she made the calculated decision not to introduce reform that would impact Year 12 students, their families, and teachers. The decision to maintain the status quo during her initial year months in office, and subsequently introduce evolutionary rather than revolutionary change, showed her understanding of stakeholder expectations and how to manage them effectively, as acknowledged in Chapter Five by one curriculum leader (HOD 2). This example of implementing incremental change in a high-performing school, emphasised the importance of knowing one's context intimately and responding to it judiciously to maintain the support and engagement of key stakeholders.

Another aspect of her context the Principal was acutely aware of from her previous experience as Deputy, was the long history of an authoritarian style of leadership on the part of the previous Head of School, and its adverse impact on teacher motivation and morale. The norm in this context was that teachers were not afforded the opportunity to have input into decisions that impacted them and their students. Lack of ownership of change efforts by teachers was common as a result. The Head of School indicated in her interview, that the College Board was aware of this dynamic, from teacher representation on that governing body. The appointment of a new

Principal with a democratic leadership approach was due in part, to the recognition that teachers in this context had expressed a desire to be an integral part of decision-making processes so that they would feel valued and thereby take responsibility for innovation. The Principal's acknowledgement of this phenomenon, combined with her inclusive style of leadership, led to authentic stakeholder consultation and engagement during the implementation of an internally developed fit-for-purpose Learning Framework and student well-being programs. Chapter 5, Section 5.1.1 provides specific data about the approach taken by the Head of School to consult teachers and secure their support for school improvement endeavours. For example, one middle leader (HOD 3), explained how the Principal's inclusive approach contributed to teacher engagement through consultation and an invitation to participate in the reform agenda.

Similar to her counterparts in the previous sites, the Principal in Case Study

Three, knew her context intimately as a result of being a long-term employee, and was subsequently skilled in managing stakeholder expectations. What set her apart from her counterparts, was her insight into the institution from the parent perspective, stemming from the experience of her children's education at the College. She understood that the organisation needed to re-invent itself to survive. More importantly, she appreciated the willingness of parents to be involved in this endeavour and knew how to leverage their passion and expertise to transform the institution. Her decision to involve parents in reviewing the mission of the School, as well as participating broadly in curriculum delivery, was based on her accurate assessment of their sentiments.

Whilst the Principal received a directive from the Board to increase student enrolments, ultimately, she was responsible for implementing the strategy to achieve this goal. She indicated in her interview, that it was her decision to embark on a long

process of consulting stakeholders in order to build consensus for the School's new educational direction, a renewed focus on revitalising learning and student well-being in tandem. This case study demonstrated how an effective leader built a ground swell of support for change among major stakeholder groups. The Head of School used her transformational leadership skills to engage the parent body to gain backing for school improvement initiatives as detailed in Chapter 6, Section 6.3.5. Several teachers who were also parents of students attending the School, responded positively to this momentum for change and were able to motivate many of their peers to support reform. Additionally, this case study confirmed the finding in studies which have demonstrated a positive link between parent involvement in their child's education and student engagement in learning and achievement (Henderson & Mapp, 2002).

In contrast to his counterparts, the Head of School in Case Study Four, was less effective in negotiating contextual dynamics. Despite being at the College for a decade and aware of the vested interests of key stakeholder groups, he neglected to adequately consult them in planning and implementing reform. For example, as explained in Chapter Seven, the introduction of the IB was problematic from the outset. The Board's insistence on introducing this program, at the behest of some influential parents, was the catalyst for a lack of cohesion in the school improvement blueprint. The Principal's response to this directive, was to accept it without challenge, knowing full well the potential risk that it could overcrowd the reform agenda and contribute to change fatigue among teachers. Persevering with an overloaded itinerary possibly contributed to resistance on the part of some teachers, probably slowing the progress of reform. This state of affairs was exacerbated by his suspicion of the parent body and subsequent disengagement from them.

This case, in contrast to the previous three, pointed to the inability of the Head to effectively analyse his context and respond accordingly, particularly in relation to engaging and managing the expectations of the parent body. It also emphasised the deficiency on his part to achieve alignment between himself and the Board in relation to the reform agenda. Alignment between the Board and Principal regarding improvement endeavours was shown to be important in a meta-analysis of 16 studies (Hornigh, Ruiter & van Thiel, 2020). The results here are also consistent with the finding in the literature, that reform efforts often fail because they do not take context into consideration (Fullan, Cuttress & Kilcher, 2005). Despite all its financial and other advantages, progress was constrained in this institution, due to the Principal's inability to effectively negotiate his complex context, in particular, the Board and parent body. It is reasonable to suggest that in this context, the Head of School needed to work with the Board and parents to overcome some of the challenges at hand, such as resetting the reform agenda. The significance of this case is that it emphasises the necessity, on the part of school leaders, to engage and build relationships with highly influential stakeholder groups such as the Board and parents, to achieve synergy between them and thereby contribute momentum to reform efforts.

8.2 Developing a coalition to drive instructional capacity building

The four case studies showed that in these school contexts, the Principal was not the main instructional leader. This finding is consistent with other studies such as Leithwood et al. (2004) and Seashore Louis et al. (2010). The case study schools also demonstrated that instructional leadership was divested by the Principal in other leaders with the necessary expertise, which again replicates various studies such as Pont et al. (2008) and Printy et al. (2009). In the Australian context, increased

autonomy and accountability in secondary schools have led to work intensification for principals (Heffernan & Pierpoint, 2020). Due to an expanded workload and competing priorities such as managing staff, students and parents, as well as administrative duties, school leaders report a lack of time to focus on the core business of teaching and learning (Riley, See, Marsh & Dicke, 2020). In relation to this thesis, all four Heads of School acknowledged that they were not the primary instructional leader in their context. Their role was reported to be one of setting direction in terms of articulating a vision focused on the enhancement of student outcomes, building consensus and leadership capacity, instilling in teachers collective accountability for the learning of students, and creating readiness for change to lay a strong foundation for reform.

In this section I argue that due to the demands of the role identified above (Heffernan & Pierpoint, 2020; Riley, et al., 2020), principals in the case study schools created a coalition to drive instructional change because they reported lacking the time due to their myriad other responsibilities, and in some cases expertise, to lead on this front at an institutional level. As a result, leadership for learning was shared by nominated members of the SLT and other staff. The leadership influence of the Principal was thereby mediated through people (Bendikson, 2011) and systems implemented to support shared leadership for learning (Sebastian, Huang & Allensworth, 2016). The findings are significant in emphasising that Heads of School in the case studies were moving away from a heroic model of principal-centric leadership, to delegating responsibility to various leaders based on their expertise. This practice was probably based on the understanding that leadership of learning needs to be shared because school improvement is a collective endeavour that involves collaborative decision-making and action (Drysdale, et al., 2014). Empirical evidence from the case studies

demonstrates that effective school leadership is not principal-centric. Rather, it is a collective enterprise that represents a contemporary paradigm of leading school improvement (Crowther, Andrews, Morgan & O'Neill, 2012). It is most effective when teachers are placed at the centre of school reform efforts to improve teaching and learning (Harris & Jones, 2017).

In Case Study One, the process of shared leadership for learning was led jointly by members of the SLT, particularly the Deputy Principal and Director of Innovative Learning, as well as rank-and-file teachers who formed the Research Team. One of the main distinguishing factors in this context was the key role in leading learning played by the latter as discussed in Chapter 4, a phenomenon not observed elsewhere in the case study schools. The Deputy Principal, due to his instructional expertise, was responsible for generating synergy and momentum for change at an institutional level. The Director of Innovative Learning, a newly created fit-for-purpose role, worked with stakeholders at faculty level to drive change. The Research Team, drawn from teachers not in promotions positions, was formed especially to drive instructional change at a grass roots level, to complement the impetus created by senior leaders.

Teacher interviews detailed in Chapter 4, Section 4.1.2 revealed that there was an open-minded attitude to reform due to the trust that was built between the SLT and staff as a result of ongoing consultation. The Research Team in particular was trusted by teachers because they had credibility as leaders of evidence-based practice. For example, one participant acknowledged that this steering committee had been instrumental in not only stimulating constant discussion about pedagogy, but also providing ongoing assistance to improve it (Teacher 5). This mostly positive relationship with teachers probably enabled it to function effectively as a guiding

coalition to create readiness for change by supporting teachers to enhance their pedagogy. The flatter model required for leading change (Harris, 2005), was evident in this context. One participant (Teacher 4) recognised that shared leadership for learning had become normative practice and effective in driving instructional change at all levels of the School.

The first two case study schools share similarities in relation to distributed leadership of change. Both Principals explained how they undertook an extensive consultation process to create readiness for change and develop a sense of ownership of reform on the part of stakeholders, thereby reducing the type of resistance to innovation documented in the change leadership literature (Kotter, 2012). Teacher consultation, noted in the previous case, was also a productive process in the second institution in terms of gaining the trust and cooperation of teachers, the stakeholder group impacted most by change.

In Case Study Two, the consultation was reportedly also effective because it was followed by instructional capacity building provided by credible leaders. This important responsibility was delegated by the Principal to the SLT to function as a steering committee to lead reform at all levels. The strategy was explained as follows, "We're driving it together... the direction came from me, but the work on the ground is being done by the Directors in collaboration with the HODs" (Principal). The appointee to the newly established fit-for-purpose role, Director of Research and Innovative Learning, was active at the school level in building the leadership capability of HODs, as explained in Chapter 5, Section 5.1.3. Additionally, the Director of Curriculum worked with faculty leaders and their teams at the department level to build instructional capacity. A notable difference in Case Study Two was that the guiding coalition was tasked with

enhancing internal collaboration by breaking down faculty-based barriers. Additionally, external facilitators were engaged to support faculty leaders in this process. The incremental pace of reforms was probably also significant in relation to engaging most teachers in the school improvement journey.

Case Study Three was similar in some respects to the previous two sites. A steering committee comprising members of the SLT was formed by the Principal. This group consisted of the Principal, Deputy Principal, Directors of Curriculum, Professional Learning, Students, and ICT (HOD 3). The Deputy Principal, in a similar vein to his counterpart in Case Study One, was the most skilled and experienced exponent of instructional leadership. He led the coalition, focusing on collaborating with HODs to improve teaching and learning. The leadership group in this context, also consisted of the Director of Professional Learning, who was leading the development of staff at both the school and faculty level. At a department and individual level, the Learning Support Coordinator, a recently established role, was working with teachers to improve their practice. The creation of new positions as part of a guiding coalition, was evident in three case studies. In this case study, tailor made staff appointments included the Learning Support Coordinator and Well-being Coordinator.

Whilst shared leadership for learning was a significant contributing factor in improving the learning environment in this context, it was found through the participant interviews and school visits that the SLT was less consultative and more directive than their counterparts in the other case studies, in what was essentially a more hierarchical, top-down approach. This was perhaps due to the sense of urgency associated with change, a distinctive element in this institution, certainly in contrast to the slow burn evident in Case Study One and Two. Nevertheless, they were effectively

executing their roles consistent with leaders in turnaround schools as reported in the literature (Day, 2007; Fullan, 2006; Leithwood et al., 2010). This case was also distinct in terms of the parent body collaboratively driving change through a high level of engagement in curriculum delivery. The partnership established between the parent body and teachers through a process of consultation, evidently provided significant momentum to school improvement efforts.

Case Study Four represented a contrast to the other sites in that no new staff appointments were made by the Head of School to share leadership for learning. The Principal claimed that he had "built a good team of people" around him, committed to improving teaching and learning. However, unlike the other case study schools, no fit-for-purpose appointments were made, or a Research Team established, probably hampering the reform agenda. While the Directors of Curriculum and Professional Learning worked with HODs to drive pedagogical change, they lacked the gravitas of an instructional expert such as that in Case Study One and Three. The decision not to build a robust steering committee was based on the strategy of developing the capacity of HODs to be instructional leaders rather than faculty administrators. The use of the Appretio model and AIS consultants to work with faculty leaders produced benefits in this regard. For the most part, they were effectively supported by the Director of Professional Learning in leading learning in their department.

However, the lack of an effective guiding coalition at school level, meant that creating readiness for change and building trust, which appeared to be effective at other case study schools, were lacking in this context. This scenario emphasised the importance of leading reform synchronously at all levels of a school, in order to disrupt the status quo and embed change across the institution. On reflection in his interview,

the Principal acknowledged that he had not laid sufficient groundwork to prepare the institution for the scale of change being implemented. Participant interviews indicated that the magnitude of curriculum reform was overwhelming for many staff, already fatigued from previous change efforts, leading to some teacher resistance to the agenda.

The lack of creating readiness for change acknowledged by the Head of School, as well as the absence of a guiding coalition to address opposition, probably hindered the progress of his strategic plans by teachers not universally adopting the reform agenda. Chapter 7, Section 7.1.3 discussed the responses of some participants to the expansive reforms being implemented. For example, one curriculum leader made the following observation. "It [reform] has been on too broad a scale; it's too big, and overwhelming. So, I don't think it's been adopted in some subject areas" (HOD 3). Another Head of Department (HOD 4) candidly admitted to not adopting change in his faculty. The significance of this case was that it emphasised the phenomenon that at even the most substantially resourced schools, change and improvement can be opposed by teachers when the appropriate systems and processes have not been established, particularly creating readiness for change and building trust between leaders and teachers.

The school improvement literature offers examples of the importance of trust and its relationship to reform (Modoona, 2017). For example, one study refers to trust as a form of social capital that successful leaders harness to effectively lead change (Harris, Caldwell & Longmuir, 2013). Another observed that a strong culture of relational trust was evident in schools where teachers were highly committed, prepared to innovate and take academic risks, and engaged parents proactively (Robinson et al., 2009). Finally, a study found that relational trust builds the appropriate conditions for school improvement (Bryk & Schneider, 2003). These studies, along with the findings

from the four case studies in this thesis, point to trust as an important commodity school leaders would be well advised to invest in, to facilitate internal reform in their own context.

8.3 Aligning key stakeholders to the reform agenda

The definition of school leadership adopted for this study and discussed in Chapter 2, is a process of influence that aligns key stakeholders to the educational direction of the school (Hallinger & Heck, 2010b). This section analyses how two main stakeholder groups, teachers and parents, were aligned to the strategic direction of the institution, through various leaders who operated at the school and faculty level. Significantly, it demonstrates how alignment occurs through a filtering process that involves disseminating a vision from the Principal to the SLT, and from there to teachers and other stakeholders. This process has been referred to in the literature as a trickledown effect (Hallinger & Heck, 1996a; Luyten et al., 2005; Witziers, Bosker & Kruger, 2003), whereby the leadership influence of the Head of School is shown to be mediated through people and processes. The focus in this section will be on the alignment of teachers, with a brief discussion of parent engagement. I argue that the importance of stakeholder alignment, is in its contribution to consensus building, thereby contributing momentum for school improvement. I also address the significance of structural and cognitive alignment (Andrews & Conway, 2020). The latter refers to ensuring stakeholders understand the reform agenda, commit to it, and take collective responsibility for it. The former refers to the systems and processes implemented to achieve stakeholder alignment.

All four Heads of School prioritised the enhancement of pedagogy as fundamentally important to enriching learning, the ultimate purpose of their school

improvement plans. Securing commitment from teachers to improve their pedagogy, was in effect, aligning them to the main strategic goal of the institution. Alignment of teachers occurred at both levels, school and faculty, through communities of practice, aiming to build the individual and collective instructional capacity of teachers in a safe, supportive environment. The strategies aimed at developing teacher capacity were consistent with the approaches adopted by the highest performing school systems as found by Barber and Mourshed (2007; 2009). Strategies in the case study schools included sustaining dialogue about enhancing discipline-specific pedagogy, sharing best practice, coaching, and mentoring.

Although all cases shared several common approaches, each had its own distinctive, contextually appropriate processes for achieving its objectives. This finding again confirms the main theoretical assumption underpinning this thesis, that leaders implement a combination of context specific practices to improve their school. Significantly, they emphasise that whilst leaders display the same repertoire of practices (Leithwood & Mascall, 2008), they are best placed to implement the most contextually appropriate strategies. This supports the finding in the literature that what works in one context may not gain traction in another (Reynolds et al, 2016).

The two main processes operating to achieve alignment of teachers to the overall school direction, will be referred to as 'pull and push factors' (Dampson & Frempong, 2018). Pull factors occurred at the school level, and push factors operated in the faculty. The predominant strategy at a school level was the establishment of a steering committee to drive alignment through professional learning (Andrews, et. al., 2004). This approach was underpinned by a process of filtering of the educational direction of the School to the faculty level through relevant leaders. The prevalent method at a

department level was the requirement for HODs to develop faculty goals aligned to the strategic objectives of the institution. This practice was facilitated by a process of HODs working with their teams in PLCs to understand the agenda, and take collective ownership of and accountability for achieving their goals.

Depending on the context, pull or push factors were more dominant. However, the effectiveness of alignment in all case studies was found to be contingent upon the all-important engagement of teachers, a critical stakeholder group in this regard. In turn, support of teachers for the agenda depended on the extent to which they trusted their leaders at school and faculty level. Evidence from the case study schools will be provided to show how school leaders at both levels interacted to align stakeholders to the educational direction of the School, and in the process, built consensus through structural and constructive alignment to support internally driven reform.

In Case Study One, the Head of School and all four HOD participants discussed the strategy used by the steering committee to align teachers to the main pillar of improving pedagogy through the implementation of the AFL Framework. In this context, pull factors were more dominant in terms of engaging HODs through a guiding coalition, to support the educational direction of the school. At the School level, the Deputy Principal, Director of Professional Learning, and Research Team were leading ongoing meetings and professional learning sessions with all staff, producing a filtering effect of disseminating the reform agenda into the faculty and classroom level. Two participants (Teacher 1 and 5) commented on the trickle-down effect operating in the School. They observed that the Director of Innovative Learning and Research Team served as an effective conduit between the SLT and HODs, and their faculty team.

Another important alignment practice involved HODs setting faculty improvement goals

linked to the School strategic plan. This strategy was supported by the process of HODs working with their faculty to achieve these goals, guided by the steering committee.

The effectiveness of alignment in this context was largely due to the phenomenon that a guiding coalition with expertise and credibility was leading this agenda on a broad front, facilitating teacher engagement. Focusing on a singular, cohesive instrument had been an effective strategy, according to interviewees, represented by the following comment from a curriculum leader. "After three years, I think most teachers are on board with the changes" (HOD 2). The integrated and sustained focus on delivering the AFL Framework suggests that it provided momentum with regard to moving faculties along the required path. A significant finding at this site, was the high level of trust built between the SLT and teachers, through the transformational leadership skills of the Principal in combination with the instructional leadership expertise of the Deputy. The solidarity among staff may help explain the progress made in enhancing pedagogy in this context.

In Case Study Two, participants referred to a long process of stakeholder consultation undertaken by the Head of School, which appeared to contribute to establishing a shared vision through certain assurances, such as, the values of the School and the commitment to high academic achievement would not change. Although the educational direction of the institution had been set by the Principal, the operational process of alignment was different to the previous case study, in terms of the absence of a dynamic guiding coalition. Therefore, push factors were probably more dominant in achieving the cognitive alignment of teachers. Faculty leaders filled the breach through a consultative, inclusive style of leadership and explanation to their team of the rationale for change, whilst also re-assuring teachers that the pursuit of academic

excellence remained an important goal. They secured the support of a critical mass of teachers, through a range of strategies, in the face of some resistance from longer serving teachers who may have preferred to maintain the status quo.

Teachers were empowered, through a more democratic and inclusive leadership approach, to be involved in decision making, which reportedly contributed to ownership of, and accountability for the agenda at a faculty level. The internally developed Learning Framework was an example of the outcome of this approach, probably serving to align teachers to the new educational direction. As one curriculum leader observed, this alignment was progressing positively. "Everyone's heading in the right direction" (HOD 2). The whole of faculty approach and collective accountability for their goals, provided the momentum to align individual departments to institutional goals. An important contributing element in this context, similar to Case Study One, was that teachers could develop their instructional capacity without adverse judgement, in a psychologically safe environment, due to the level of trust that had been built between leaders and teachers.

Case Study Three was similar to the first site in that pull factors were more dominant due to a guiding coalition effectively driving alignment at the school level. Led by a dynamic Deputy Principal and assisted by the Directors of Professional Learning and Curriculum, the cascading phenomenon described previously was operating to good effect in this context as acknowledged by one middle leader (HOD 2). The Deputy Principal, the main change agent, was effectively leading professional learning with periodic input from external facilitators (Teacher 1). He was able to do so due to his professional standing among teachers, commented on by many participants. "The Deputy has great credibility with staff" (HOD 2). "People trust him. So staff are happy to

make the journey with him" (HOD 1). This level of credibility, acknowledged by the Principal, may have assisted in establishing a high level of trust between not only himself and teachers, but more broadly between leaders and teachers.

The process of coaching and mentoring HODs to build instructional leadership capacity, led by the Director of Professional Learning, was also highly productive. The Director of Curriculum was working concurrently with faculty leaders to develop goals driven by the College strategic plan, possibly resulting in more cohesion and impetus for the reform agenda in this context. The significance of these findings is that they may explain the contribution of a credible guiding coalition to achieving stakeholder alignment at a school level. The role of the Principal then, rather than managing stakeholder engagement, was shown to be one of assembling an influential steering committee to accomplish this important task of alignment and consensus building.

Unique to Case Study Three was the decision taken by the Principal to increase the number of annual staff professional development days allocated to teacher professional learning, a structural mechanism to drive alignment. As explained in Chapter 6, two key weekly processes, teacher professional learning sessions alternating at the school and faculty level, probably provided momentum to enhancing pedagogy and aligning teachers to overall school goals. Also distinctive to this site, was the phenomenon of using the NESA registration and accreditation regulatory process to provide impetus for alignment. This approach was largely effective in achieving consistency and consensus across the organisation. A third approach in this context, was the use of the APST to assist in improving pedagogy. The significance of this collective strategy emphasised the benefits of using externally developed frameworks to provide legitimacy and momentum for internally driven reform.

In Case Study Four, as explained in Chapter 7, the Principal secured the commitment of the SLT to the reform agenda. However, unlike the other Heads of School in this study, he had not expanded this team to create a more robust and credible steering committee. Consequently, push factors were more dominant in achieving alignment most likely due to the absence of a dynamic guiding coalition operating at school level. According to one curriculum leader (HOD 1), an effective alignment strategy, also employed in other case study schools, was the implementation of faculty goals aligned to school strategic endeavours. Nevertheless, a lack of trust in the senior leadership of the institution probably led to unchecked pockets of resistance to the implementation of the QTF on the grounds that it was pushed through too quickly and not seen as either the most contemporary or relevant pedagogical model. Other middle leaders expressed reservations in relation to the reform agenda. For example, one questioned the validity of the QTF (HOD 4), another the rushed implementation of change (HOD 2), and a third, change fatigue (HOD 3).

At the same time, there was reluctance on the part of some teachers to change their practice due to the pressure from parents to deliver high academic results in the HSC. Curriculum leaders were aware of this tension, as observed by one. "There has been some resistance on the part of some teachers to the direction the school is taking" (HOD 1). An important finding here, particularly for school leaders, is to engage the hearts of stakeholders first, and then their minds (Leithwood et al., 2004). That is to say, transformational leadership practices are essential in motivating teachers and aligning them cognitively to change efforts. Another conclusion that can be drawn from this case study school is the significance of creating relational trust in an organisation to facilitate change (Kouzes & Posner, 2007). The absence of effective transformational leadership

in this context, compared to the other case studies, particularly in relation to engaging and aligning stakeholders to organisational goals, probably resulted in a lack of staff consensus, representing a possible impediment to the progress of the reform agenda.

To conclude this section, a brief commentary on the alignment of parents to the overall direction of each school will be presented. This strategy had mixed results across the sites, from an unprecedented level of parent engagement in Case Study Three, to a precarious relationship between the institution and community in Case Study Four.

In Case Study One, responses from participants in Chapter 4, Section 4.3.5, indicated that the parent body was very supportive of the reforms introduced at the College, particularly the focus on academic achievement. Nevertheless, the Principal acknowledged in Section 4.1.4 that further work was required to establish a stronger partnership with the parent body to support learning. The Principal acknowledged the need to communicate more often to parents about the progress of the reform agenda. Frequent communication to parents from curriculum leaders was suggested by the Head of School as a process to achieve improved parent engagement.

Similarly, in Case Study Two, participants acknowledged in Chapter 5, Section 5.3.5, the need to be more proactive in establishing a partnership with parents to secure support for the learning initiatives specific to each discipline. "So, at some point the parents need to be brought into the conversation" (HOD 3). This observation was corroborated by another participant, "It's an area where we could do more, get parents involved in the life of the School" (Teacher 2). This relationship was slated to be built through the process of communicating regularly via a curriculum newsletter, presenting to parents about faculty goals at information evenings, administering annual

satisfaction surveys, and including parents in reviewing the reporting system. An aspirational goal was actively engaging parents in addressing the mental health of students, a strategic objective of the institution.

A distinctive feature of Case Study Three, was that parent engagement represented the fourth pillar in the strategic plan. Chapter 6, Section 6.3.5, detailed a highly successful parent engagement strategy that led to an unprecedented level of involvement by this group in the broader life of the institution. The Principal noted the extra-ordinary parent engagement in the School that appeared to be providing momentum for transforming learning. The strengthened student commitment to learning was attributed by her to increased parental engagement. At the school level, this involved participation in reviewing the mission of the College. At the faculty level, parents responded enthusiastically to the invitation to be involved actively in curriculum delivery, including supporting teachers by working alongside them in lessons as industry experts. Several site visits indicated the constant presence of parents in classrooms, which had become the norm in this context, but quite unique in terms of the four case studies.

At the other end of the spectrum, Case Study Four emphasised the drawbacks of the lack of a coherent parent engagement strategy, beyond going through the motions of administering satisfaction surveys and inviting this stakeholder group to attend information sessions about curriculum reform. Despite the rhetoric of the Principal, "I see my role as aligning the big dots", he neglected to establish systems to engage parents in his reform agenda. The strained relationship between parents and the School and its detrimental effects which were explained in detail in Chapter 7, Section 7.3.5, are likely to have hampered the momentum of the reform agenda.

Overall, the significance of the case studies is that they demonstrated the educational collateral parents potentially have in relation to change efforts. In some cases, they may have added significant value to student learning as a result of schools actively pursuing their contribution. In other instances, the lack of a strategy to seek their input showed the consequences of a lost opportunity in terms of aligning parents to the educational direction of the institution and establishing a mutually beneficial partnership with them.

8.4 Building academic culture to facilitate change

The School Effectiveness and School Improvement literature argues that culture is an important variable in enhancing school performance (Petersen & Deal, 2009; Seashore Louis, Murphy & Smylie, 2016). More specifically, studies have found that effective principals fostered a learning culture in their school (Gurr, Drysdale & Mulford, 2006) by setting high academic expectations, as well as optimising opportunities to learn and time on task (Creemers & Kyriakides, 2012). Subsequently, there have been calls in the literature for leaders to apply specific interventions aimed at influencing culture (Hopkins, 2016), particularly developing the appropriate learning culture (Tan, 2014), to facilitate improvement (Kirtman & Fullan, 2016).

In this section I argue that leaders in the case study schools strategically built an academic culture at school and faculty level to facilitate improvement of teaching and learning. Empirical evidence from the four case studies demonstrates how leaders contributed to this outcome through similar processes, with slight contextual variations, enabling teachers to improve their pedagogy in a psychologically safe atmosphere (Schein, 2015). Additionally, it showed how leadership influence is mediated through culture. The data also emphasise the critical role middle leaders play in building

academic culture at faculty level. Their close proximity to the classroom, the seat of learning (Grootenboer, 2018), enables them to do so effectively through sustaining a supportive community of practice.

In Case Study One, a robust learning culture had been established over a three-year period, by a guiding coalition consisting of the Deputy Principal, Director of Innovative Learning, and Research Team. They had essentially shaped a particular type of culture, academically rigorous and psychologically safe, allowing time for teachers to collaborate and adjust to the changes being introduced. This phenomenon was acknowledged by at least one participant. "The SLT have created a culture where teachers enjoy collaborating to improving teaching and learning" (HOD 1). "There's a strong culture of learning here. The students find it to be quite positive" (Teacher 4). There was a consensus among interview participants that the learning culture established in recent years, was having a largely positive effect on teachers and students in terms of invigorating teaching and learning. Professional learning in communities of practice had become normative practice and the main process which typically facilitated instructional capacity building (AITSL, 2014; Cole, 2012).

The Principal had established weekly meetings focusing on the implementation of the AFL Framework. At these gatherings, the Research Team or senior leaders would introduce global empirical evidence which formed the basis of dialogue about best practice pedagogy. This created the expectation that teachers change their pedagogy to align with the available research. The singular focus on professional learning directed at implementing the AFL framework, appeared to have provided a unifying element to that specific academic culture.

Additionally, the steering committee promoted a non-judgemental culture, in which teachers could strive to improve their classroom practice secure in the knowledge that they were being genuinely supported, rather than performance managed (HOD 4). The introduction of the Swivl model and associated 'Open to Learning' conversations conducted by the Deputy Principal and Director of Innovative Learning, were reinforcing the message that this process of coaching and mentoring was provided to all teachers to improve their pedagogy (HOD 1). Whilst teachers were expected to change with the times, and held to high standards, they did so in a non-threatening environment. The rigorous, yet psychologically safe and supportive academic culture that had been established, was more or less supporting the strategic goal of enhancing pedagogy to improve learning outcomes.

A similarity between Case Study One and Two was the shared sense of purpose in terms of developing a framework that was ostensibly contributing to the professional learning culture of the institution. A distinctive feature of the second case study, was a historically strong learning culture for students. However, pedagogy was not contemporary or best practice in many instances. The challenge was to create a culture where teachers were supported to improve their pedagogy to become facilitators of learning rather than carriers of content (Principal). To this end, the Head of School acknowledged that the Learning Framework was largely effective in terms of focusing the mind and energy of teachers on a single apparatus to improve teaching and learning. The creation of this framework in a PLC at school level, strengthened the teacher learning culture of the institution. One curriculum leader indicated that the professional learning culture had subsequently become part of the DNA of the institution (HOD 2). Ongoing professional learning in supportive communities of practice at faculty level not

only contributed to increased teacher agency, but also to ownership of the reform agenda and generating accountability to the faculty, a powerful motivating factor.

The overall impact of these measures seemed to have been to motivate teachers to improve their pedagogical practice for the benefit of students, as well as the reputation of the faculty. At this site, HODs exerted their leadership influence on faculty culture through their Assistant and team of teachers. Additionally, a new democratic and consultative style of leadership on the part of most middle leaders, more or less engaged and motivated teachers to develop their practice in PLCs through sustained dialogue about pedagogy and sharing of resources. This seemed to have led to a collaborative culture at faculty level, contributing to collective ownership of and accountability for building instructional capacity to improve student learning, the main strategic goal in this context.

Building an academic culture was most distinctive in Case Study Three, in terms of the progress made. Chapter 6, Section 6.1.2, documents in detail how over a period of three years, the academic culture was transformed through a new educational direction and professional learning of teachers, at multiple levels within the institution, as well as beyond its borders. According to the Head of School, the Deputy Principal had been instrumental in changing the learning culture (Principal). He was able to contribute significantly to this transformation by supporting teachers to introduce academic rigour in the curriculum, set high expectations of students, implement individual learning plans for designated students, and require that they be creators of knowledge rather than consumers of information (HOD 1).

Teachers appreciated the changing culture, particularly its focus on rigour and adding value to student learning. Students welcomed curriculum revitalisation and new

learning opportunities. They responded positively to a new emphasis by teachers on intrinsic rather than extrinsic rewards, the introduction of individual learning plans based on diagnosed needs, and a focus on students taking personal responsibility for learning by developing the appropriate attitudes and skills to be an effective, lifelong learner. The strategy of setting high academic expectations, as well as optimising opportunities to learn and time on task related to learning (Creemers & Kyriakides, 2012), had been largely effective in building the academic culture of the School.

As discussed previously, particularly at length in Chapter 6, parents in this context overwhelmingly endorsed reform through their engagement in curriculum matters, the extent to which was idiosyncratic to this institution, and probably due to the transformational leadership of the Principal. The Deputy had also been influential in contributing to the academic culture of the institution, as acknowledged by one curriculum leader. "The Deputy Principal was instrumental in developing the learning culture in the school" (HOD 2). At faculty level, HODs had established a psychologically safe environment (Schein, 2015) to facilitate instructional capacity building. The process of coaching and mentoring teachers in a non-judgmental and supportive way, appeared to have produced positive results in terms of creating a culture in which it was the norm to enhance pedagogical practice through individual and collective efforts. The main point of difference in this context, was the strong partnership between teachers and parents which contributed substantially to a dynamic learning culture.

In Case Study Four, the Head of School acknowledged the importance of an academic culture to his reform agenda. "The culture you set up in the school is really important. You must have a culture that supports the quality of teaching and learning to achieve academic success and sustainability" (Principal). He explained in his interview

that he was committed to implementing such a culture. Despite the many challenges noted in Chapter 7, the SLT had been successful to some extent in changing the academic culture. A collaborative learning culture within and between faculties was established in the institution, based on a shared sense of purpose to enhance pedagogy. Additionally, the instructional leadership capacity of HODs and Assistants, was being effectively built by the Director of Professional Learning, contributing to the academic culture of the institution.

Faculty leaders were striving to develop an academic culture through collaboration in PLCs. A practical example of this was teachers participating in workshops based on the work of Hugh Mackay, aimed at changing and improving school culture. Another effective approach was the mentoring of teachers to build their instructional capacity to embed the QTF in teaching and learning programs. They also conducted goal setting with teachers and their performance reviews against the APST. Another effective strategy in this context, was the contracting of external facilitators such as AIS consultants to work with faculties to achieve their goals. A less effective strategy which may have hindered the enhancement of faculty culture to an extent, was the inability to shift some teachers who were resistant to change their practice because of a long track record of strong student performance in external examinations.

To summarise, in this section I argued that a robust academic culture can facilitate improved teaching and learning. Significantly, empirical evidence from the case studies emphasises the practices implemented by leaders, and the processes they embedded in their context, to establish this type of culture. Leaders at both school and faculty level, contributed to this objective through the implementation of context specific approaches such as customised learning frameworks. Another example of a

contextually effective practice was the creation of a new timetable structure in the fourth case study school to increase opportunities to learn and time on task.

Conversely, a common strategy in the case studies was the establishment of communities of practice in which to build instructional capacity in a psychologically safe environment. Nevertheless, this approach had a distinctive focus in each institution, such as the delivery of student well-being programs to build academic resilience. Another effective practice was to deploy internal facilitators to work with teachers to enhance their pedagogy. Different staff members were allocated specific roles in order to contribute to the development of an academic culture aimed at enhancing teaching and learning. This culture was shown to be a mediator of leadership influence to varying degrees in the case study schools.

8.5 Conclusion

The significance of this chapter, and the thesis more broadly, is that it responds to calls in the School Effectiveness and School Improvement literature to systematically test theories on what to improve and how to achieve this (Creemers & Kyriakides, 2012). To begin with, the main theoretical assumption underpinning this thesis, that effective school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to develop the school learning environment and improve teaching (Leithwood & Sun, 2012; Marks & Printy, 2003; Printy et al., 2009), has been comprehensively analysed and confirmed. Then, evidence from the case study schools was discussed to emphasise what was improved and how this was achieved to varying degrees in four distinct contexts. I argued that the following four factors: negotiating contextual dynamics to plan and implement reform, developing a coalition to drive instructional change,

aligning key stakeholders to the reform agenda, and building academic culture to facilitate change, were collectively required to contribute to school improvement. These strategies were implemented through a combination of contextually appropriate leadership practices and range of processes.

First, I argued that context matters by pointing to the complex relationship between context and leadership, to demonstrate how effective leaders negotiate contextual dynamics skilfully to contribute to school improvement. The data confirmed the theory that, "There is no single leadership formula for improving schools. Rather, successful principals draw differentially on elements of both instructional and transformational leadership and tailor their strategies to their particular school context" (Day et al., 2016, p. 253). The four case study schools provide empirical evidence of how effective leaders adapt their practices to their school context (Hallinger, 2018), to meet the learning needs of their students and the values of their school community (Askell-Williams & Koh, 2020). They implemented a differentiated approach based on an analysis of their unique context and planned accordingly (Gurr & Drysdale, 2005). By way of contrast, an example from the final case study was used to explain the adverse implications of not reading and responding appropriately to context. The significance of contextual literacy is that it emphasises to school leaders the importance of understanding local complexity and shows how school improvement strategies are skilfully customised to their unique setting.

Second, whilst the principal is a significant factor in school improvement (Gurr, et al., 2006; Drysdale, Goode & Gurr, 2009), I argued that Heads of School in the four case studies were not the main instructional leader in their context. They were more focused on setting direction, building the leadership capacity of their team, and creating

readiness for change. Due to their work intensification and lack of time to focus on the core business of teaching and learning (Heffernan & Pierpoint, 2020; Riley, et al., 2020), Heads of School created a coalition to drive instructional change because, it was argued, they recognised that school improvement is a collective endeavour that involves collaborative decision-making (Drysdale, et al, 2014). In most cases, the leadership influence of the Principal was mediated through a well-credentialled steering committee which led change simultaneously at school and faculty level to drive improvement. Empirical evidence from the case study schools demonstrated that effective school leadership is not principal-centric, it is a collective endeavour that represents a contemporary paradigm of leading school improvement (Crowther et al., 2012). The significance of the specific examples from the case studies demonstrated that instructional reform efforts are more likely to be effective when sustained, shared leadership for learning occurs at multiple levels of the institution.

Third, I argued that principals in the case study schools prioritised the alignment of key stakeholders to the educational direction of the institution to build support and momentum for their reform agenda. The role of the Principal focused on using their transformational skills to motivate and engage stakeholders in supporting reform. The Head of School also assembled an influential steering committee to accomplish the important task of stakeholder alignment and consensus building. Operationally, this alignment, which was both structural and cognitive in nature, was generated by leaders at both the school and faculty level, through 'pull' and 'push' factors. Depending on context, pull or push factors were more dominant. A credible institutional guiding coalition usually contributed to pull factors being more influential. In other contexts, push factors were more prominent due to the influence of the faculty leadership team.

The significance of these factors is that they emphasise the contribution of an effective guiding coalition to achieving stakeholder alignment at school level, and that of curriculum leaders at faculty level.

I also argued that creating relational trust between leaders and teachers was valuable in relation to facilitating change. In cases where teachers trusted their leaders at school and faculty level, they were more likely to support reforms and share accountability for it. Conversely, the lack of trust and its adverse impact on school improvement was evident in Case Study Four. The significance of the case studies is that they also demonstrated the momentum parents can generate in support of reform efforts, when actively engaged through a contextually specific strategy.

Finally, I argued that culture plays an important role in facilitating school improvement. To that end, empirical evidence was provided to demonstrate how leaders implemented context specific interventions to influence culture at school and faculty level. While Heads of School and their leadership team were actively building a psychologically safe culture at an organisational level, department heads were focusing on developing a rigorous academic culture, as well as one of cooperation and collective accountability in their faculty. Evidence from three case studies demonstrated how resistance to change could be diminished by building a safe and supportive culture. The significance of the data is that it emphasised the importance of culture as a significant mediating variable between leadership and school improvement. It also shed light on the processes that leaders follow to effectively build a culture that facilitates reform, particularly through collaboration in communities of practice.

In summary, the significance of the four-factor model of school improvement is that it emphasises the critical factors in the four cases study schools that were

harnessed to enable reform, the strategic decisions school leaders made to build momentum for improvement, the way leadership influence was mediated through people and school conditions, and the processes that underpinned effective leadership. The value of this model, particularly its contribution to the literature as well as practitioners, can be illustrated by comparing it to an existing one in the school improvement research. The Four Paths Framework (Leithwood, Sun & Pollock, 2017), explains how principals can improve school conditions through the following paths: relational, emotional, organisational, and family. The main shortcomings of this model are that it is principal-centric, and crucially, does not explain how schools conditions can be improved. Therefore, the usefulness of this framework to practitioners, particularly the broader leadership team, is limited.

In contrast, the four-factor model unpacked in this chapter, casts the leadership net much wider, and importantly, provides empirical evidence of how their influence can be exerted to develop the school learning environment to enhance instructional capacity and learning. This practitioner based model is, therefore, much more pragmatically useful for school leaders.

The next chapter will highlight the contribution of this study to existing knowledge gaps in the field, focusing on how specific contextual factors are influenced to make a positive difference to the school learning environment and effective teaching, as well as how leadership influence is mediated through people and processes at multiple levels. It will outline the limitations of the thesis and make suggestions for further research to enhance the school leadership knowledge base. It will also draw the study to a close following a brief reflection on the professional implications of writing this thesis.

Chapter 9 - Choosing the right drivers

9.0 Introduction

Chapter 8 discussed the significance of a model of school improvement that emerged from the data collected and analysed from four case study schools. I argued that the four factors within the model are collectively required, albeit to different degrees depending on context, to make a positive difference to the school learning environment and effective teaching. This chapter focuses on the contribution of this thesis to the gaps in the School Effectiveness and School Improvement literature. It is presented in five sections. First, the purpose and research questions directing this thesis are re-iterated. Second, the most salient findings and their implications are explained in relation to the research aims, the analysis of the main theoretical assumption underlying the investigation, and relevant literature. Third, the contribution of this thesis to the gaps in the literature is examined. Next, the limitations of the thesis are identified and recommendations for further research made. Finally, the dissertation is concluded with a reflection on its potential value to me professionally and the broader school improvement community.

9.1 Purpose of the thesis

The purpose of this thesis was to investigate the differential leadership practices that develop the school learning environment to facilitate effective teaching, within a 'self-improving school' paradigm. The rationale for this investigation emerged from a gap identified in the School Effectiveness and School Improvement research, following a comprehensive literature review detailed in Chapter Two. It was based on calls in the literature for researchers to study how enhancing the school learning environment could contribute to the effectiveness of schools (Kyriakides & Creemers, 2016).

A conceptual framework to guide the investigation was developed from the literature review. It was derived in particular from the DMEE (Creemers & Kyriakides, 2008). The faculty level, not contained in the model, was added to my conceptual framework in order to examine leadership at this level, and to also determine the contribution of the faculty leadership team to developing the school learning environment to enhance teaching.

The research questions to be explored were derived from the conceptual framework and appear below:

- ➤ What practices are implemented by school leaders to improve the school learning environment?
- ➤ What practices are implemented by faculty leaders to improve the faculty learning environment?
- ➤ What practices are implemented by leaders to align the faculty learning environment to the school learning environment?
- ➤ What practices are implemented by school leaders to improve teacher effectiveness?

9.2 Significant findings and their implications

Chapters 4-7 outlined the major findings that emerged from the collection and analysis of data. The findings confirmed the main underlying theoretical assumption that effective school leaders simultaneously implement a range of context specific instructional and transformational practices in an integrated and distributed way to develop the school learning environment and improve teaching (Leithwood & Sun, 2012; Marks & Printy, 2003; Printy et al., 2009). A synthesis of the major findings led to the emergence of a four-factor model of school improvement. The critical leadership practices in the model are: negotiating contextual dynamics to plan and implement

reform, developing a coalition to drive instructional capacity building, aligning key stakeholders to the reform agenda, and building academic culture to facilitate change.

I argued that this model is significant for four reasons. First, it sheds light on crucial elements of the case study schools that were harnessed to facilitate reform.

Second, the strategic decisions school leaders made in relation to each of these constructs to build consensus and momentum for improvement, are emphasised. Third, it shows how leadership influence is mediated through people and school conditions.

Finally, the processes that underpin effective leadership, are brought to bear. I also argued that the four factors are collectively required, in varying context specific degrees, to contribute to school improvement.

This research has important implications for practice, first and foremost, in relation to how leaders can potentially improve their school learning environment to enhance teaching. It could also inform school leader professional learning. The fourfactor model reveals potentially right drivers for school improvement (Fullan, 2011) and the processes that underpin them. First, school leaders must appreciate that context matters in so much as school improvement strategies customised to each unique setting are more likely to be effective, than a one-size-fits-all approach (Reynolds et al, 2016). Three skilful leaders in the case study schools demonstrated a high level of contextual literacy, the capacity to understand the complexity of their context, and respond accordingly with customised strategies. For example, they constantly engaged and built relationships with highly influential stakeholder groups such as the Board and parents, in order to achieve synergy between them and contribute momentum to reform efforts.

Second, the model confirmed that leadership of school improvement is mediated through various leaders allocated specific roles by the Head of School. It thereby invites leaders to recognise the need to move away from a heroic model of principal-centric leadership (Drysdale et al, 2014), to a collaborative one of delegating responsibility to a guiding coalition based on their experience and expertise. This was particularly the case in relation to sustained instructional leadership at multiple levels of an institution. It also emphasises that a shared leadership for learning strategy is more likely to be effective when it disrupts the status quo and synchronously embeds change across the organisation. The importance of creating readiness for change (Kotter, 2012) and building trust (Kouzes & Posner, 2007) between leaders and teachers was re-iterated in the case study schools, serving as a significant lesson to current and emerging leaders.

Third, the model emphasised the necessity of prioritising the alignment of key stakeholders to the educational direction of the School to build support and momentum for reform. It underscored the importance of the strategic role of the Principal in terms of setting direction. Their associated function is primarily to assemble an influential steering committee to accomplish the important task of stakeholder alignment and consensus building. This group, operating at an institutional level, can be ably assisted by middle leaders simultaneously undertaking the same task at faculty level.

The model revealed how alignment occurs through a trickle-down effect (Hallinger & Heck, 1996a; Luyten et al., 2005; Witziers et al., 2003), a filtering process that involves disseminating a vision from the Principal to the committee, and from there to other stakeholders, thereby creating synergy and momentum for school improvement. It also impresses upon leaders the all-important engagement of teachers, and the processes that can be followed to empower them to be involved in decision

making, contributing to ownership of, and accountability for the reform agenda at a grass roots level. The case studies also demonstrated how effective alignment of parents to the reform agenda can establish a mutually beneficial partnership and momentum for change.

Finally, the model emphasises the importance of culture as one of the main mediating variables between leadership and school improvement. It reveals the specific interventions leaders can implement to influence culture at school and faculty level. For example, it sheds light on the leadership practices and processes that effectively build a culture that facilitates reform, particularly through collaboration in communities of practice. Furthermore, it shows leaders how resistance to change on the part of teachers can be mitigated by building a safe and supportive culture (Schein, 2015).

9.3 Contribution to gaps in the literature

The following section summarises the contribution of this thesis to the existing gaps in the School Effectiveness and School Improvement literature in relation to the analysis of the main underlying theoretical assumption and synthesised data linked to the major research questions guiding this thesis. A shortcoming of the extant research has been identified as the lack of systematic testing of theories in relation to what to improve in schools and how to achieve this (Creemers & Kyriakides, 2012). A contribution this thesis makes is that it has confirmed an important theory through the findings from a multi-site case study in four independent secondary institutions. At the heart of this contribution is the four-factor model of school improvement, with its empirical evidence for context specific leadership practices and processes that improve the school learning environment and teaching.

Another criticism of the current research, such as the Leithwood & Riehl (2003) model, is its examination of leadership functions rather than practices and processes (Creemers & Kyriakides, 2012). A further concern about the Australian school improvement tradition is that relates primarily to educational management and administration (de Nobile, 2018a). This thesis focuses on leadership for learning and emphasises how it is mediated through people and conditions at different levels. Furthermore, the processes underpinning these leadership practices are also emphasised. The four-factor model provides valuable insights for school leaders, school leadership development programs, and researchers, on how to mobilise the right drivers for school improvement. This blueprint stands in contrast to the many reform efforts that fail because they employ the wrong drivers such as external testing regimes and accountability based on test results (Fullan, 2011).

The four-factor model makes an original contribution to leadership discourse by offering insights into the dynamic 'how' of improving the school learning environment, absent from the research (Muijs et al., 2016). "The contribution of school leadership to student learning is now sufficiently well-documented that one of the most important questions facing practicing leaders and leadership scholars is 'how'. How does school leadership influence learning?" (Leithwood, Sun & Schumacker, 2020, p. 571). The model emphasises the right drivers, the combination of strategically significant, shared transformational and instructional practices available to school leaders to develop their school learning environment and enhance teaching and learning. They include negotiating contextual dynamics to plan and implement reform, developing a coalition to drive instructional change, aligning key stakeholders to the reform agenda, and building academic culture to facilitate change. In addition to the school improvement

drivers available to leaders, the model importantly highlights the processes that can be followed to effectively achieve reform. It therefore has currency in that it not only adds empirical evidence to the extant literature, but also has potential value for leaders.

Scholars have argued that leadership is situated in a particular context and is influenced by it (Eacott, 2015). Nevertheless, the school leadership and improvement literature does not say much more about this relationship, other than that it is important. Responding to calls in the literature to study how effective principals respond to their context (Hallinger, 2018), this thesis demonstrates how effective leaders in the case study schools responded to their unique context to strategically lead school improvement. It provides empirical evidence from school leaders as to how they managed the challenges of their context to develop the school learning environment and improve teaching.

This inquiry also sheds light on context specific practices and processes in relation to leaders diagnosing their context in shaping their reform agenda.

Significantly, this study demonstrates how leaders establish a vision, secure the support of the institution's governing body, and implement a strategic plan to bring it to fruition. It also demonstrates how leaders think on their feet and adjust their actions when encountering setbacks. Overall, the study provides evidence in support of contextual literacy to guide practitioners in effective school improvement from the outset.

Another important contribution this thesis makes to the existing gaps in the literature is in relation to the effective leadership of change at different levels in a school, particularly that of middle leaders. The empirical evidence of middle leader influence is relatively limited (Harris, Jones, Ismail & Nguyen, 2019). Responding to calls in the literature for more research into middle leadership, this thesis provides a

broader conceptualisation of leadership, as reflected in the multi-layered conceptual framework which guided this investigation. It involves a re-conceptualisation of leadership, which requires moving away from the heroic leadership of the principal to encompass other senior leaders and department heads. Middle leaders in the case study schools demonstrated that they are, more often than not, the main instructional leaders in secondary schools. They also showed they lead reform at a faculty level.

The case studies also emphasised the processes principals follow to divest instructional leadership in other leaders selected on the basis of their experience and expertise. For example, due to the demands of the Head of School role, a coalition was formed to create readiness for change and drive instructional reform. This practice demonstrated how the leadership influence of the Principal was mediated through people and systems implemented to support shared leadership for learning.

In addition to exploring the role of middle leaders in school improvement, this thesis also investigated the interaction between various leaders at different levels of a school. That examination provided empirical evidence of the strategic alignment of stakeholders to a reform agenda. In particular, it showed how horizontal and vertical integration are achieved by leaders who operate at multiple levels: whole school (meso); faculty (macro); and classroom (micro). Prospective readers such as current and emerging leaders are given an insight into the consultation and filtering processes involved in stakeholder alignment. They are also shown the importance of aligning goals, curriculum, instructional practice and professional development (Cassada, Stevens & Wilson, 2005) to the strategic goals of the school. Additionally, they gain an insight into how securing stakeholder commitment to the agenda contributes to consensus building, thereby contributing momentum for school improvement through

collective ownership and accountability. These practices and processes can potentially be customised and implemented by leaders in their own context, to provide the impetus for their own reform agenda.

Finally, this thesis demonstrates the importance of culture as one of the main mediating variables between leadership and improvement of the school learning environment. It provides an understanding of the cultural engineering processes leaders follow to effectively build a psychologically safe and supportive culture (Schein, 2015) that facilitates reform, particularly through collaboration in communities of practice, to improve teaching. Furthermore, the findings contribute a greater awareness of the critical role middle leaders play in building academic culture at faculty level. As the main instructional leaders in the case study schools, they demonstrated how to establish an academic faculty culture and sustain communities of practice as the foundation on which to build the instructional capacity of teachers. They also showed how to build trust with teachers through consultation and collective decision-making to develop a culture that facilitates, rather than hampers, school improvement. This represents another contribution of this thesis, given that middle leaders are underinvestigated in the school leadership literature in comparison to senior leaders (Grootenboer, 2018; Leithwood, 2016).

In summary, this thesis adds value to the School Effectiveness and School Improvement knowledge base in the following ways. Consistent with the central principle of these research traditions, I have argued that schools can make a difference to student academic and non-cognitive outcomes. The in-school-effect is demonstrated through four detailed case studies which provide empirical evidence of leadership practices at school and faculty level, that contribute to the development of a school

learning environment that sustains effective teaching and engaging learning. The multiperspective case studies provide a different viewpoint to the existing literature. In addition, they contain rich descriptions of leadership practices which are often missing in the research. They also provide an insight into the internal processes and interpersonal dynamics that are integral to school leadership. In particular, the case studies emphasise the multi-level influences of leaders on teacher effectiveness and student outcomes, absent in previous School Effectiveness and School Improvement research models. Finally, the empirical evidence from the case studies is curated into a four-factor model of leadership practices that can be adapted by schools leaders and customised to their own context to improve teacher quality and student outcomes.

9.4 Limitations of the investigation and recommendations for further research

The methodology selected for this inquiry was effective in terms of generating valuable data in response to the research questions guiding it. Nevertheless, it is important to note the potential limitations therein. First, the data was drawn from a limited sample of independent secondary schools in NSW. Due to the sample size and context, generalisations to other schools are not warranted (Yin, 2018). Second, despite my best efforts to limit my own inherent bias and that of participants through corroboration and triangulation, the data may be biased due to our values, assumptions and prejudices. Third, the inclusion of the Deputy Principal at each site, could have provided worthwhile insights into the leadership of school improvement, given their role and proximity to major stakeholders in the process. Nevertheless, the limitations of the investigation do not adversely affect the research outcomes. Valid and reliable conclusions can be drawn from the data which may be useful for school leaders, providers of school leadership training programs, researchers and policy makers.

In light of the limitations noted above, this section makes brief suggestions for further research in four areas. First, conducting similar studies in different school systems and diverse contexts, including public schools in various states and territories across the country, would facilitate a cross sector and inter jurisdictional comparison, which could potentially produce additional and more nuanced findings.

Second, due to the cross-sectional nature of the investigation, collecting longitudinal data at these locations could also provide insights into the impact of leadership decisions, particularly in relation to how leaders improve their school and sustain that trajectory over time. The process of leadership by its nature is longitudinal (Riley, et al., 2020). Therefore, follow up studies are recommended.

Third, the interaction between leaders at different levels requires further investigation (Reynolds et al, 2016), to determine how they contribute to institutional improvement. In this regard, interviewing the Deputy Principal and other members of executive teams could possibly provide a broader perspective and richer data relevant to leading school improvement. Furthermore, the Deputy Principal has been treated as a silent partner in the School Effectiveness and School Improvement literature, overlooking the contribution to reform of a key school leader. This role warrants further inquiry to determine its importance to school effectiveness and improvement.

Fourth, more specific research into the instructional leadership of HODs in school improvement is required to build this knowledge base, as their close proximity to teaching and learning (Grootenboer, 2018) could provide valuable insights in this regard. Future research in these areas could potentially lead to the development of further theoretical models to be tested, leading to theory generation and a broader evidence base in relation to school improvement.

9.5 Concluding comments

The School Effectiveness and School Improvement research base is largely inconclusive about exactly how leadership influences school and student outcomes (Harris, 2005; Dinham, 2007). Therefore, research that increases understanding of the processes that improve schools, is necessary (Stoll et al., 2006). Responding to calls in the literature, this investigation has sought to provide insights into how leaders, inclusive of but not limited to the principal, improve the school learning environment and teaching, within a self-improving school paradigm. The outcome of the inquiry is the empirical evidence supporting a four-factor model of leadership practices and associated processes that contributed to improvement of the school learning environment and effective teaching, to varying degrees, in four case study schools.

This evidence base can be taken up by policy makers, researchers and practitioners (Reynolds, et al., 2016). Policy makers could potentially increase their engagement with the research to set policy direction for school improvement.

Researchers can conduct further research to test the findings here and develop additional theoretical models. School leadership preparation can focus on these findings to better prepare emerging leaders to lead their own school (Seashore Louis, et al., 2010). Most importantly, school leaders can decide where to focus their reform efforts (Leithwood et al., 2010) to improve their own school.

The most gratifying aspect of this research from the perspective of a current Head of School, is that I am, and intend to continue to apply the findings of this study in my own context. I have already discovered the practical benefits of the four-factor model of school improvement and plan to share these findings more broadly in future publications and interactions with fellow leaders.

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Appendices

Invitation to participate in this study - Letter to Principal



[INSERT date]
[INSERT Name]
[INSERT Address 1]
[INSERT Address 2]

Dear Principal

I am a PhD research student at the School of Education UNSW, conducting a project on 'Leadership practices that contribute to the development of the school learning environment and effective teaching'. This research is being undertaken to learn more about leadership practices that influence school level conditions to facilitate effective teaching and learning in order to improve and sustain student achievement.

The reason we want to know more about how leaders develop the school environment to enhance teaching and learning is that this evidence-based practice can inform the nature and extent of internally driven school reform and improvement.

I would like to invite your school to participate in this study.

If you decide to take part in the research we would:

- Ask you to complete a short demographic questionnaire and participate in a 45-minute face-to-face interview.
- *Invite 4 heads of department to* participate in this study. They would be asked to complete a short demographic questionnaire and participate in a 45-minute face-to-face interview.
- Invite 5 teachers to participate in this study. They would be asked to complete a short demographic questionnaire and participate in a 45-minute face-to-face interview.

If you would like more information or are interested in being part of this research study, please contact:

Name:	Alistair Symons
Email:	z3247992@unsw.edu.au
Phone:	0477 906 302

Taking part in this research study is voluntary. If you decide not to take part in this research, your decision will not affect your relationship with The University of New South Wales.

This research has been reviewed and approved by The University of New South Wales Human Research Ethics Committee. If you have any complaints or concerns about this research study, please email humanethics@unsw.edu.au or phone +61 2 9385 6222 quoting the following number HC16976.

Yours sincerely,

Alistair Symons

PhD Student Investigator

Invitation to participate in this study - Email to Participants



[INSERT date] [INSERT Name] [INSERT Address 1] [INSERT Address 2]

Dear Participant

Research Study Title:

Leadership practices that contribute to the development of the school learning environment and effective teaching.

I am writing to invite you to participate in this research study being conducted by The University of New South Wales, School of Education. Your Principal has agreed to participate in this study and nominated you as an interested participant.

This research is being done to learn more about leadership practices that influence school level conditions to facilitate effective teaching and learning in order to improve and sustain student achievement.

The reason we want to know more about how leaders develop the school environment to enhance teaching and learning is that this evidence-based practice can inform the nature and extent of internally driven school reform and improvement.

If you decide to take part in the research, we would:

• Ask you to complete a short demographic questionnaire and participate in a 45-minute face-to-face interview.

If you would like more information or are interested in being part of this research study, please contact:

Name:	Alistair Symons
Email:	z3247992@unsw.edu.au
Phone:	0477 906 302

Taking part in this research study is voluntary. You may decide not to take part. If you decide not to take part in this research, your decision will not affect your relationship with The University of New South Wales.

This research has been reviewed and approved by The University of New South Wales Human Research Ethics Committee. If you have any complaints or concerns about the research study, please email humanethics@unsw.edu.au or phone +61 2 9385 6222 quoting the following number HC16976.

Yours sincerely,

Alistair Symons

PhD Student Investigator

UNSW Participation Information Statement and Consent Form



1. What is this research study about?

You are invited to take part in this research study. The study aims to investigate the leadership practices that contribute to the development of the school learning environment and effective teaching.

You have been invited because your principal has expressed interest in participating in this study.

2. Who is conducting this research?

3. Inclusion/Exclusion Criteria

Before you decide to participate in this research study, we need to ensure that you consent to take part. The study is looking to recruit people who meet the following criteria:

• Principals, Heads of Department and Teachers who have been employed at this school for 3-5 years.

4. Do I have to take part in this research study?

Participation in this research study is voluntary. If you do not want to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the study at any stage.

If you decide you want to take part in this research study, you will be asked to:

- Read the information carefully (ask questions if necessary);
- Sign and return the consent form if you decide to participate in this study;
- Take a copy of this form for you to keep.

5. What does participation in this research require, and are there any risks involved?

If you decide to take part in the research study, we will ask you to complete the following tasks:

Interview: You will be asked to participate in a 45-minute face-to-face interview. During the interview, a member of the research team will ask you about your perceptions of how leadership practices develop school level conditions to facilitate effective teaching.

To ensure we record your responses accurately, we seek your consent to digitally record the interview using an audio device.

You are free to withdraw from the research at any time. If you withdraw from the research, we will destroy any information that has already been collected.

We don't expect this interview to cause any harm or discomfort. However, if you experience feelings of discomfort as a result of participation in this study you can let the research team know and they will provide you with assistance.

Short Demographic Questionnaire: Before the interview you will be asked to complete a short paper-based questionnaire. The questionnaire will ask you questions about your background and experience and should take approximately 5-10 minutes to complete.

6. What are the possible benefits to participation?

We hope to use information we get from this research study to benefit other school leaders, heads of department and teachers who are seeking to bring about school improvement through developing the learning environment to enhance teaching.

7. What will happen to information about me?

By signing the consent form you consent to the research team collecting and using information about you for this research study. We will keep your data for seven years. We will store information about you in a non-identifiable digital form that is username and password protected.

8. How and when will I find out what the results of the research study are?

The research team intend to publish and report the results of this research study in a variety of ways. All information published will be done in a way that will not identify you or your school.

If you would like to receive a copy of the results you can let the research team know by adding your email or postal address within the consent form. We will only use these details to send you the results of the research.

9. What if I want to withdraw from this research study?

If you do consent to participate, you may withdraw at any time. You can do so by completing the 'Withdrawal of Consent Form' which is provided at the end of this document. Alternatively, you can ring the research team and tell them you no longer want to participate. Your decision not to participate or to withdraw from the study will not affect your relationship with UNSW Australia.

10. What should I do if I have further questions about my involvement in this research study?

The person you may need to contact will depend on the nature of your query. If you require further information regarding this study or if you have any problems which may be related to your involvement in the study, you can contact the following member/s of the research team:

Research Team Contact Details

Name	Dr
Position	Chief Investigator
Telephone	02 9385 1986
Email	@unsw.edu.au

What if I have a complaint or any concerns about this research study?

If you have a complaint regarding any aspect of the study or the way it is being conducted, please contact the UNSW Human Ethics Coordinator:

Complaints Contact

Position	UNSW Human Research Ethics Coordinator
Telephone	+ 61 2 9385 6222
Email	humanethics@unsw.edu.au
HC Reference	
Number	16976

Consent Form - Participant providing own consent

Declaration by the participant

	I understand I am being asked to provide consent to participate in this research study; I have read the Participant Information Sheet or someone has read it to me in a language that
	I understand;
	I understand the purposes, study tasks and risks of the research described in the study;
	I understand that the research team will audio record the interviews; I agree to be recorded for this purpose.
	I provide my consent for the information collected about me to be used for the purpose of this research study only.
	I have had an opportunity to ask questions and I am satisfied with the answers I have received;
	I freely agree to participate in this research study as described and understand that I am free
	to withdraw at any time during the study and withdrawal will not affect my relationship with
_	the University of New South Wales and/or research team members;
	I would like to receive a copy of the study results via email or post, I have provided my details below and ask that they be used for this purpose only;
	Name:
	Address:
	Email Address:

i unuci stanu that i wili be	e given a signed copy of this document to keep.	
Participant Signature		
Name of Research		
Participant (please print)		
Signature of Research Participant		
Date		
	lanation of this research study, its study activities and risks at has understood that explanation.	and I
Researcher Signature		
Name of Researcher		
(please print)		
Signature of Researcher		
Date		

Note: All parties signing the consent section must date their own signature.

Form for Withdrawal of Participation

I wish to **WITHDRAW** my consent to participate in this research study described above and understand that such withdrawal **WILL NOT** affect my relationship with The University of New South Wales.

I would like any information which I have provided for the purpose of this research study withdrawn.

Participant Signature

Name of Research Participant (please print)	
Signature of Research Participant	
r ai ticipalit	
Date	

The section for Withdrawal of Participation should be forwarded to:

Chief Investigator Name:	Dr
Email:	@unsw.edu.au
Phone:	02 9385 1986
Postal Address:	UNSW, School of Education, Kensington, NSW, 2052,
	Australia

Appendix 4.1

Demographic Questionnaire - Principal



Instructions:

Dear Principal,

1. What is your age range? \circ 31-40

Please complete the demographic questionnaire below, prior to the one-on-one interview with the UNSW researcher.

Your responses will be confirmed and collected during the interview.

	0	41-50
	0	51-60
	0	61+
2.	What i	s your gender? Male Female
3.	What i	s your highest educational qualification?
4.	What i	s/are your teaching discipline(s)?
5.	How lo	ong have you been teaching?

ó .	How many schools have you taught in?
7.	In which sector(s) have you taught?
3.	What other roles have you had in/out of schools?
9.	How long have you been Principal in this school?
10.	What are the demographic characteristics of the teachers in your school? (size, gender distribution, qualifications, and teaching experience)
	Thank you for completing this demographic questionnaire.

Appendix 4.2

Demographic Questionnaire - Head of Department



Instructions:

Dear Head of Department

Please complete the demographic questionnaire below, prior to the one-on-one interview with the UNSW researcher.

Your responses will be confirmed and collected during the interview.

1.	What is your age range?
	o 31-40
	o 41-50
	o 51-60
	o 61+
2.	What is your gender?
	o Male
	o Female
	0 Telliate
2	TATE
3.	What is your highest educational qualification?
4.	What is/are your teaching discipline(s)?
5.	How long have you been teaching?

6.	How many schools have you taught in?
7.	In which sector(s) have you taught?
8.	What other roles have you had in/out of schools?
9.	How long have you been Head of Department in this school?
10.	What are the demographic characteristics of the teachers in your department? (size, gender distribution, qualifications, and teaching experience)
	Thank you for completing this demographic questionnaire.

Appendix 4.3

Demographic Questionnaire - Teacher



Instructions:

Dear Teacher

Please complete the demographic questionnaire below, prior to the one-on-one interview with the UNSW researcher.

Your responses will be confirmed and collected during the interview.

1.	What is your age range?
	o 21-30
	o 31-40
	o 41-50
	o 51-60
	o 61+
2.	What is your gender?
	o Male
	o Female
ว	What is your highest advectional qualification?
3.	What is your highest educational qualification?
4.	What is/are your teaching discipline(s)?
5	How long have you been teaching?
٥.	now long have you been teaching.

6.	How many schools have you taught in?
7.	In which sector(s) have you taught?
8.	What other roles have you had in/out of schools?
9.	What is your length of service in this school?
10.	What are the demographic characteristics of the teachers in your department? (size, gender distribution, qualifications, and teaching experience)
	Thank you for completing this demographic questionnaire.

Appendix 5.1

Interview Questions - Principal



Dear Principal,

The questions below will be asked during the one-on-one interview with the UNSW researcher.

They are being provided prior to the interview to give you the opportunity to think about them beforehand.

This study defines the school learning environment in terms of:

- managing student attendance and behaviour
- encouraging positive attitudes to learning
- establishing high academic expectations
- involving parents/community in learning
- allocating resources to support learning
- facilitating effective pedagogy
- celebrating academic achievement
- 1. Could you describe the learning environment in this school, in relation to the above?
- 2. What are the priorities regarding improving the school learning environment?
- 3. Who is leading the improvement of the school learning environment?
- 4. What are they doing to improve the school learning environment?

5.	What are some of the attributes of the people who are leading the improvement of the school learning environment?
6.	What are the indicators that the school learning environment is improving?
7.	Focusing specifically on teaching, could you describe what highly effective teachers in the school do?
8.	What are the attributes of the highly effective teachers in the school?
9.	What does this school do to improve teaching?
10.	. What are the measures of improvement in teaching?
	Thank you for participating in the one-on-one interview.

Appendix 5.2

Interview Questions - Head of Department



Dear Head of Department,

The questions below will be asked during the one-on-one interview with the UNSW researcher.

They are being provided prior to the interview to give you the opportunity to think about them beforehand.

This study defines the school learning environment in terms of:

- managing student attendance and behaviour
- encouraging positive attitudes to learning
- having high academic expectations
- involving parents/community in learning
- providing resources to support learning
- facilitating effective pedagogy
- celebrating academic achievement
- 1. Could you describe the learning environment in this school, in relation to the above?
- 2. What are the priorities regarding improving the school learning environment?
- 3. Who is leading the improvement of the school learning environment?
- 4. What are they doing to improve the school learning environment?
- 5. What are some of the attributes of the people who are leading the improvement of the school learning environment?

6.	What are the indicators that the school learning environment is improving?
7.	What are your priorities regarding improving your faculty learning environment?

- 8. Focusing specifically on teaching, could you describe what highly effective teachers in your faculty do?
- 9. What are the attributes of the highly effective teachers in your faculty?
- 10. What does this school do to improve teaching?
- 11. How do you improve teaching in your faculty?
- 12. What are the measures of improvement in teaching?

Thank you for participating in the one-on-one interview.

Appendix 5.3

Interview Questions - Teacher



Dear Teacher,

The questions below will be asked during the one-on-one interview with the UNSW researcher.

They are being provided prior to the interview to give you the opportunity to think about them beforehand.

This study defines learning environment in terms of:

- managing student attendance and behaviour
- encouraging positive attitudes to learning
- having high academic expectations
- involving parents/community in learning
- providing resources to support learning
- facilitating effective pedagogy
- celebrating academic achievement
- 1. Could you describe the learning environment in this school, in relation to the above?
- 2. What are the priorities regarding improving the school learning environment?
- 3. What are the priorities regarding improving your faculty learning environment?
- 4. Who is leading the improvement of the learning environment, in the school/in the faculty?
- 5. What are they doing to improve the school/faculty learning environment?

6.	What are some of the attributes of the people who are leading the improvement of the
	school/faculty learning environment?

- 7. What are the indicators that the school/faculty learning environment is improving?
- 8. Focusing specifically on teaching, could you describe what highly effective teachers in your school/faculty do?
- 9. What are the attributes of the highly effective teachers in the school/faculty?
- 10. What does this school/faculty do to improve teaching?
- 11. What are the measures of improvement in teaching?

Thank you for participating in the one-on-one interview.

Sample Observation Protocol



<u>Date/Time</u>: 19 September 2018 / 11.30am-1.30pm

<u>Location/Context</u>: Case Study 4 – Session 2 on a Staff Development Day

<u>Description</u>: Teacher presentation of an innovative classroom practice to engage

students in learning.

A Mathematics teacher presented to her peers on how she integrated technology into her lessons to differentiate the curriculum whilst also engaging students in their learning. Using her audience to simulate a classroom scenario, she demonstrated how *Kahoot* is implemented in her lessons as a revision tool. She then went on to create online accounts for her colleagues so they could use the app in their lessons.

Analysis of data:

In this activity the teacher explained that she had learned to use *Kahoot* and other software such as *Geogebra* at a previous staff development day. She practised using it with her colleagues in the Maths faculty. She had also learned differentiation strategies, again at a previous staff development, as part of the institutional approach to pursuing excellent pedagogy through the implementation of the NSW Quality Teaching Framework. The teacher combined the two skills acquired during teacher professional learning sessions to design a quiz for her class prior to the upcoming topic test, noting that students were very engaged in this activity, as opposed to a pen-and-paper revision test.

Relevance to RQ:

Research Question 3 – What practices are implemented by school and faculty leaders to improve teacher effectiveness?

This session overall and the activity described in particular, provide evidence of the following: the strategic approving to developing quality teaching through the implementation of the QTF; ongoing professional learning led by school and faculty leaders; opportunities for teachers to develop their pedagogical skills and share best practice with their peers. It also highlighted effective leadership processes in developing teacher effectiveness.

Interview Protocol



Interview Format:

1. Briefing

- Introductions
- Thank you for participating evidence-based practice
- 45-minute duration
- Confidentiality and privacy
- Written consent PISC form
- Confirmation of demographic data
- Consent to audio-record for accuracy verbatim transcription
- Offer copy of summary research report

2. Interview proper

- Standard, open-ended interview
- Follow-up questions
- Prompts
- Manual back-up

3. De-briefing

- Anything to add member checking
- Next steps in fieldwork
- Thank you for your insights and participation