http://researchcommons.waikato.ac.nz/

Research Commons at the University of Waikato

Copyright Statement:

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

The thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right
 to be identified as the author of the thesis, and due acknowledgement will be
 made to the author where appropriate.
- You will obtain the author's permission before publishing any material from the thesis.

An Exploration of Models

for

Collaborative Leadership

of

Virtual Learning Network e-learning clusters in New Zealand

A thesis

submitted in fulfilment

of the requirements for the degree

of

Master of Educational Leadership

at

The University of Waikato

by

PHILIP C. BUCHANAN



ABSTRACT

Faced with the massive challenge of personalising learning for a digital generation, educators need to change. Collaboration and collaborative leadership, having been widely researched and implemented, are now considered to be strategic components of systemic transformation. Many jurisdictions have trialled or instituted collaborative or cluster-based projects to address the collaborative learning and leadership challenges associated with transformation through e-learning. New Zealand's emergent Virtual Learning Network and e-learning clusters have developed new system leadership from grass-roots rural schools with the Ministry of Education's strategic support. Can these innovative collaborative projects continue to improve and sustainably contribute to educational transformation in NZ?

This small-scale qualitative investigation focussed on semi-structured interviews to gather data from five experienced rural cluster Lead Principals who have successfully lead some of the stronger rural Virtual Learning Network e-learning clusters across rural New Zealand. The key research question which guided the interview questions and analysis was:

What are the most appropriate and effective models for managing and leading collaborative relationships and shared long-term projects for clusters of secondary schools?

The aim was to discover the conceptions and use of collaborative processes, structures and leadership which theoretical and empirical research suggest are critical components of system-wide reform.

Research findings reveal a high degree of congruence between theory and the practice of these five Lead Principals. Their understanding and practice of shared, distributive and collaborative leadership, with a clear commitment to building leadership capacity, was based more upon their personal style supported by some knowledge of the international literature, rather than formal policies. However, while these maturing clusters have outlasted many others, they continue to face challenges of viability, effectiveness, and sustainability, in spite of the Ministry of Education's support for critical

background infrastructure. The data shows that while there are strong collaborative support strategies in and for these clusters, two key areas could be addressed more effectively.

This study suggests that collaborative transparency and accountability needs strengthening in a drive for consistent quality and effectiveness. Also, while new structural cluster models may be emerging in the search for sustainability, the well-established cost of managing collaborations has not yet been accepted by the MoE, leaving 100% of the burden of management costs on the mostly small rural schools. It is therefore recommended that the MoE find a way around the current school-based funding model to at least partially fund regional management of these transformative collaborations, perhaps within the government's current drive to build performance management and accountability. New Zealand's systemic transformation and its current leadership within the e-learning revolution may depend on it.

ACKNOWLEDGEMENTS

The completion of this Master's thesis was dependent on a select group of people (colleagues and whānau) who, along with some timely changes in my employment, made this research meaningful, enjoyable, possible and complete.

To my wife, Melva, your love, understanding and unfailing encouragement were vital. Without you my journey into research and academic writing would not have been completed. I thank too, my six adult children who encouraged me in their unique ways. Special thanks go to my very special Mum for her prayers and not carrying out her threat to stay away until the thesis was finished.

To my former colleagues in previous schools, Te Aroha College and Rangitahi College, close colleagues across CoroNet, and indeed the Virtual Learning Network ePrincipals: thank you for all you were able to teach me, and for affording me a place with you on your journey of collaboration. I am also grateful to the PPTA for the opportunities it afforded me to complete my research.

I owe a debt of gratitude to my long-suffering Supervisor, Jeremy Kedian. His unswerving faith, support, encouragement and insightful critiques have enabled me to complete this writing journey. Thank you for your support in the early days of CoroNet and fostering my Leadership Learning journey at so many points, especially those wonderful International Leadership Institutes. Thank you.

To Ann Briggs, Emeritus Professor of Educational Leadership: thank you for the repeated and critical contributions that you made to my writing which kept me going when I got stuck, especially this year. Your experience and insight on the topic of collaborative leadership, and the pleasure in relating to you frequently about my academic writing, will be missed. To Heather Morrell, Librarian, thank you for your timely support.

Finally, importantly, to the five VLN Lead Principal participants who shared their practice and insights: Thank you for your commitment to collaboration

and your candid comments which thoroughly informed this investigation. Your legacy is sustained as you continue to contribute to the transformation of New Zealand's education system. This thesis is a testament to your commitment and excellence!

TABLE OF CONTENTS

ABSTRAC	T	i
ACKNOW	/LEDGEMENTS	iv
TABLE OF	CONTENTS	v
LIST OF F	IGURES	x
CHAPTER	ONE INTRODUCTION	1
1.1	Setting the scene: transformation through e-learning	1
1.2	New Zealand's e-learning clusters and the Virtual Learning Network	3
1.3	Researcher orientation	4
1.4	Overview	5
CHAPTER	TWO LITERATURE REVIEW	7
2.1	Introduction to the review of international literature	7
Part Or	ne	8
2.2	Leadership for Transformation	8
2.2.1	Failed educational reforms; the challenge to change teacher's practices	9
2.2.2	The need for transformation today	g
2.2.3	How have ideas about transformation changed?	11
2.2.4	How, why can collaborative clusters help transform schooling?	11
2.2.5	The What and the Why of Collaboration	12
2.2.6	Collaboration's dimensions	14
2.2.7	Aspects of effective collaboration	16
2.2.8	Socio-political context – paradigms	22
Part Tw	/0	23
2.3	Leading or Managing Change?	23
2.3.1	Definitions and uses of terms	24
2.3.2	Review of some key conceptions of Leadership	26
2.3.3	Leaderships for collaboration	28
2	3.3.1 Distributed Leadership (DL)	28
2	3.3.2 System leadership (SL)	31
2	3.3.3 Moral Leadership	33
Part Th	ree	35
2.4	Strategies for systemic change	35

2.4.1	The Learning Organisation: lateral capacity building	35
2.4.2	Peer collaboration models	36
2.4.3	Cluster governance options	40
2.4	1.3.1 Federations in England	41
2.4	1.3.2 Some international examples of federations	43
2.4.4	Federations of schools in New Zealand	45
Part Fo	ur	46
2.5	Key requirements for effective cluster leadership and collaboration	46
2.5.1	Principals' leadership	47
2.5.2	Collaborative systems	48
2.5.3	Relational trust	49
2.5.4	Learning leadership and capacity building	49
2.5.5	Shared vision and ownership	49
2.5.6	Dialogue	50
2.5.7	Teacher leadership in teams	50
2.5.8	System leadership	50
2.5.9	Social impact	51
2.5.10	O Moral leadership	51
2.5.1	1 Collaborative culture and accountability	52
CHAPTER	THREE RESEARCH METHODOLOGY	53
CHAPTER 3.1	THREE RESEARCH METHODOLOGY	
		53
3.1	Introduction	53
3.1 3.1.1	Introduction	53 54
3.1 3.1.1 3.2	Introduction	535455
3.1 3.1.1 3.2 3.2.1	Introduction	53545555
3.1 3.1.1 3.2 3.2.1 3.2.2	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism	54555556
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3	Introduction	54555556
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3	Introduction Research paradigms	5355555659
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3 3.3.3	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation Research design Research tools	5355555659
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3 3.3 3.3.1	Introduction Research paradigms Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation Research design Research tools Mixed-methods	5355565959
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3 3.3 3.3.1 3.4	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation Research design Research tools Mixed-methods Semi-structured interviews	5354555659596060
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3 3.3 3.3.1 3.4 3.4.1 3.4.2	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation Research design Research tools Mixed-methods Semi-structured interviews Document analysis	53555556596060
3.1 3.2.1 3.2.2 3.2.3 3.3 3.3.1 3.4 3.4.1 3.4.2 3.4.3	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation. Research design Research tools Mixed-methods. Semi-structured interviews Document analysis The participants and sampling	535555565960606263
3.1 3.1.1 3.2 3.2.1 3.2.2 3.2.3 3.3 3.3.1 3.4 3.4.1 3.4.2 3.4.3 3.4.4	Introduction Research paradigms Research approaches Qualitative and Quantitative Critical Inquiry and Social Constructionism The approach for this investigation Research design Research tools Mixed-methods. Semi-structured interviews Document analysis The participants and sampling Ethical issues	535455565960606263

3.7	Sum	mary	70
СНАРТЕ	R FOL	IR RESEARCH FINDINGS	71
4.1	Intro	oduction	71
4.2	Que	stion One	72
4.2	.1 CI	uster formation and Lead Principals	73
4	4.2.1.1	Project aims and goals	73
4	4.2.1.2	Lead Principals and management	75
4	4.2.1.3	Decision making, dialogue, consensus	75
4	4.2.1.4	Lead Principal roles	76
4	4.2.1.5	Lead Principal and ePrincipal	77
4.2	.2 Pr	incipals' and Board of Trustees' roles	78
4.2	.3 CI	usters' programmes and projects	79
4.2	.4 Co	ollaborative technologies used	81
4.2	.5 N	ew positions and roles across clusters	81
4.2	.6 Co	ollaborative structures and policies	83
4	4.2.6.1	Policies	83
4	4.2.6.2	Federations	83
4	4.2.6.3	Development proposals	84
4.2.	.7 N	ational collaboration – structure and policies	84
4.3	Que	stion Two	86
4.3	.1 Le	ead Principal collaboration with other principals	87
4	4.3.1.1	Lead Principal vision	87
4	4.3.1.2	Implementing the vision – relationships are key	88
4.3	.2 Le	ead Principal collaboration with their ePrincipal	89
4.3	.3 Le	ead principals on leadership development	90
4	4.3.3.1	Cluster leadership development	90
4	4.3.3.2	National leadership development	90
4.3	.4 Le	ead Principal leadership in their own schools	91
4.3	.5 Le	eadership styles or policies	92
4	4.3.5.1	Practice not policies	92
4	4.3.5.2	Collaborative leadership	93
4	4.3.5.3	Distributed leadership	93
4	4.3.5.4	One formal policy – eMentoring of ePrincipals	94
4.3	.6 Le	earning leadership - collaborative learning - learning organisations	94
4.4	Que	stion Three	96
4.4	.1 Ke	eys to effective and sustainable collaboration	97
	111	System leadership	97

	4.4	4.1.2	ePrincipal leadership	97
	4.4	4.1.3	Collaborative learning	97
	4.4	4.1.4	Relationships and dialogue	98
	4.4	4.1.5	Summary of congruent features	100
	4.4.2	Chall	lenges to effectiveness and sustainability	100
	4.4	4.2.1	Demands on Lead Principal time	100
	4.4	4.2.2	Change of principal and uneven commitment	101
	4.4	4.2.3	Challenge of pedagogical change	102
	4.4	4.2.4	The cost of collaboration	102
	4.4	4.2.5	Hierarchical management style	103
	4.4	4.2.6	Inadequate in-school resourcing or quality	103
	4.4.3	Sumi	mary	103
C	HAPTER	FIVE	DISCUSSION	105
	5.1	Introdu	uction	105
	5.2	Princip	pals' leadership	106
	5.2.1	Visio	onary leadership - shared	106
	5.2.2	Leari	ning leadership	107
	5.2.3	Colla	aborative, distributive approaches	108
	5.3	Collabo	orative systems	109
	5.3.1	Soft	federations in a rigorously autonomous system	109
	5.3.2	Mult	ti-level collaboration	110
	5.3.3	Colla	aborative leadership	112
	5.4	Relatio	onal trust	117
	5.5	Learnir	ng leadership and capacity-building	117
	5.6	Shared	I vision and ownership	118
	5.7	Dialogi	ue	119
		J		
	5.8	Teache	er leadership and teams	119
	5.9	System	ı leadership	121
	5.9.1	The e	ePrincipals	122
	5.10	Social i	impact	123
			•	
	5.11	Moral	leadership	124
	5.12	Collabo	orative culture and accountability	124
	5.13	Summa	arv	125
	~ ~		W. T	

CHAPTER	SIX CONCLUSION	126
6.1	Introduction	126
6.2	Collaborative support; collaborative accountability	126
6.3	Researcher recommendations	128
6.4	Limitations of the study	129
6.6	Areas for further research	130
REFEREN	CES	132

LIST OF FIGURES

Figure 1 Engaging teachers' theory of action (Robinson, 2007)	18
Figure 2 Brigg's conditions for successful collaboration	21
Figure 3 Distributed forms of leadership (Youngs, 2007)	30
Figure 4 Federations continuum (Standards DfES site, 2008)	42
Figure 5 E-learning projects continuum	80
Figure 6 Cluster leadership 2	114
Figure 7 Cluster leadership 1	115
Figure 8 Cluster leadership 3	115
Figure 9 Cluster leadership 4	116

LIST OF ABBREVIATIONS

Australian Capital Territory asTTLe Assessment for Teaching and Learning BBC **British Broadcasting Corporation**

BoT **Board of Trustees**

ACT

CEO Chief Executive Officer

CFG Collaborative Faculty Group

CoP Community of Practice

CoS Community of Schools

DfES Department for Education and Skills

DL Distributed Leadership

DP **Deputy Principal**

еD eDean, e-Learning Dean

EHSAS Extending Higher Standards Across Schools

eР ePrincipal, e-Learning Principal

eTeacher, e-Learning Teacher еΤ

F Facilitator

GAT Gifted and Talented

GB Governance Board HoD Head of Department

ICT Information and Communications Technologies

ICTPD Information and Communications Technologies Professional

Development

IP Internet Protocol

IT Information Technologies

ITO Industry Training Organisation

LIG Lead Implementation Group

LMS Learning Management System

LO Learning Organisation

LP Lead Principal

LS Learning system

MoE Ministry of Education

MP4 Media Protocol 4

NCSL National College of School Leadership

NZ New Zealand (or Aotearoa)

OECD Organisation for Economic Cooperation Development

OLE Online Learning Environment

PPTA Post Primary Teacher Association

Quango Quasi-Autonomous non-Government Organisation

RARD Royal Academy Research and Development

RFP Request for Proposal

SMS Short Message System (texting)

TELCO Telecommunications Company

UNESCO United Nations Economic, Scientific and Cultural

Organisation

USA United States of America

VC Videoconference

VLN Virtual Learning Network

VLN-C Virtual Learning Network Community

Even the longest journey must begin where you stand.

from note by Michael Moncur retranslating
the standard version of Lao-tzu's famous quotation.

CHAPTER ONE INTRODUCTION

1.1 Setting the scene: transformation through e-learning

We live and work in a time of critical educational change, where the focus has fallen on the experience of the learner rather than the needs of the teacher or school; personalising learning challenges many of the established systems and models, and the types of leadership employed to achieve educational transformation. While there are important changes expected for the delivery of learning within the classroom from the role of the teacher to what needs to be learned, the place of the traditional classroom itself is also being challenged. There are growing notions of blended learning that go beyond including ICTs within the classroom (Pratt, Pullar, & Trewern, 2011), to conceptions of the open classroom or schools-without-walls, even challenging the need for a student to attend a school on a daily basis (Stevens & Moffatt, 2003). Technology and critical pedagogical changes are enabling a paradigmatic change in the way teaching and learning are perceived and practiced.

Students have also changed. While schools still grapple with motivating and up-skilling learners, the digital culture that modern students grow up with has changed their expectations of learning and their perceptions about schools (Caldwell, 2006b). Many say it has changed the way students learn. 20th century's regimented classrooms where the teacher was the source of all knowledge have faded in the light of the information web and the ubiquitous smart phone which give instant access to knowledge of all sorts, challenging the traditional role of the teacher. The purpose of 'education' is being redefined, as exemplified in the recent revision of the New Zealand Curriculum. Pedagogy is now focussed on engagement and

learner-centred strategies that develop independent thinkers, wisdom and creativity rather than compliance and knowledge collection. Many associate pedagogical change and technological change to suggest that anywhere/anytime learning is the future, where blended learning will be the new norm (Graham, 2006), expecting transformation of schooling systemwide.

New technologies have also enabled a more collaborative approach across the system to address school improvement and system reform. Thinking about schooling has shifted, from 'traditional' to 'connected' and now to 'networked' learning (Barbour & Wenmoth, 2013). Principals and teachers in different places can now liaise or collaborate easily, schools can work together on a daily basis; they don't need to remain isolated islands of autonomy which often competed for student clients (Fancy, 2005). Some New Zealand schools have been collaborating using ICTs for over a decade, at various levels, in order to meet a fuller range of student learning needs (Carr-Chellman, 2004; Pullar, 2002). We now have a range of cluster types spread across the country, based on particular technologies, themes, geography or common need, including the Māori school clusters, the Super Loops and the rural or urban e-learning clusters. Their variety is illustrative of the emergent nature of this trend toward collaboration, based as it is on the strategic support and indeed wisdom of the Ministry of Education (MoE) which has offered a variety of e-learning and collaborative stimuli over this time, designed to foster innovation and transformation. This has been a well-informed (Wright, 2010) and structured process (Ministry of Education, 2006) which focussed smaller scale investment, compared to many overseas jurisdictions, on a selection of options indicated by international research designed to discover the most effective strategies for transformation of New Zealand's education system.

Not only have perceptions of teaching and learning changed, but there have been important developments in the practice of leadership in education. In the context of transformative change there are significant, even paradigmatic changes mooted. Collaborative projects (Bolstad & Gilbert, 2012), even systemic transformation, are said to require new types of leadership in order to be successful (Hargreaves & Fink, 2006). While there

may be many components of successful cluster collaboration, this research addresses the leadership aspects in the development and management of clusters of schools; collaborative leadership in particular. The literature review considers the context of and need for systemic transformation in more detail (Fullan, 2006; Hargreaves & Fink, 2006), as one's expectations and evaluation of collaborative leadership may very well be determined by the scope of the intended change; mere school improvement or system wide transformation, perhaps even social change.

1.2 New Zealand's e-learning clusters and the Virtual Learning Network

This research is based within the experience of some of the more longstanding rural secondary e-learning clusters most of which are also members of the national Virtual Learning Network (VLN). These clusters typically focussed on development and management of shared senior classes via videoconference (VC) and web-based technologies, but also fostered a range of other cluster-based and national teacher- and studentlearning programmes, some of which have endured beyond their initial three-year MoE funding (Powell & Barbour, 2011a; Stevens & Moffatt, 2003). The first of this new breed of e-learning clusters was OtagoNet which began full operations in February 2002, closely followed by CoroNet and up to 16 other clusters, eventually including some urban city-wide clusters such as DunedinNet. While all have equal opportunity to collaborate via the VLN perhaps benefitting to the extent to which they contribute, some clusters are clear leaders, some have amalgamated, some have grown and some have died; overall collaboration is alive and well, but leadership has been variable and sustainability remains a significant issue (Roberts, 2009). This is the focus of this investigation: educational leadership that develops effective and sustainable e-learning clusters and the national network, leadership which can continue to contribute to the transformation of New Zealand's education system. The question guiding this investigation was:

What are the most appropriate and contextually effective models for leading and managing collaborative relationships and shared long-term projects for clusters of secondary schools?

Five cluster Lead Principals (LP) were interviewed about their leadership conceptions and practice within their school, cluster and perhaps nationally. Four of these e-learning clusters operated collaboratively within New Zealand's national VLN (which has had up to 14 cluster members) while the fifth was a more typical Information & Communication Technologies Professional Development (ICT PD) cluster without a formal VC school component. The VLN clusters, while focussed on their own goals around school improvement, also generally aspire to a transformative impact at the national level. The data was collected from five experienced school principals who were also experienced cluster Lead Principals, three of whom were also involved in national-level leadership roles. Their interview responses were used to identify the strengths of these clusters in the light of the literature, as well to point toward areas for improved collaboration and better sustainability.

1.3 Researcher orientation

My interest in these collaborative e-learning projects was based on my prior involvement in a VC e-learning cluster, though not a cluster represented here. It was after integrating ICTs into my Physics classes successfully that I was 'volunteered' by my Principal to liaise with other schools in the development of what became the CoroNet cluster. I had begun to ride the 'knowledge wave' (Gilbert, 2005) in my Physics classes; now I was tasked to support the wave of innovation in our region. This collaborative project over eight schools captured my commitment and enthusiasm, thrusting me into a leadership role for the first time, forcing me to grapple with leadership issues I had previously avoided. It resulted in working with a wide range of educators: principals, teacher-leaders, teachers. teacher aides. administrative staff, ePrincipals, Ministry of Education leaders, tertiary leaders, as well as an extensive range of facilitators. Of course, there was a range of experience and skill represented in the people with whom I worked; some collaborative liaisons worked well, others bafflingly or frustratingly less so. I began a journey of learning about leadership, about how to influence others to accept the challenge of innovation and transformation, or just how best to support other innovators to extend into collaborative development contexts. My decision to research collaborative

leadership was based on the leadership challenges experienced personally and observed nationally as the clusters and the VLN grew over the last decade. My continued interest in the VLN is based on a belief that it is a significant component of the transformation of New Zealand's education system, with a desire that this continues through improved effectiveness and indeed their sustainability long-term. I believe that e-learning, including distance e-learning, is the basis of a paradigm shift that will change schooling and may change society.

This Postgraduate study has been a valuable stimulus to my thinking, expanding conceptual frameworks; illuminated and refined previously intuitive perceptions; prompted reflection on my own and others' leadership; and guided some changes to behaviour personally. As a reflexive declaration of personal motivation, I should clarify: selfishly, my intent is to improve my own awareness of personal leadership practice and career prospects; unselfishly, one hopes that there is beneficial learning here for others.

1.4 Overview

This paper firstly addresses the international literature around leadership of educational transformation, particularly collaborative leadership of clusters. In Chapter Three it details the qualitative research methodology and rationale for using semi-structured interviews with the five cluster Lead Principals. The sub-questions that guided the interview questions and prompts, based on the key question (above), focus on leadership and management models designed to assist transformation; implementing collaborative models across secondary schools; collaborative leadership practices that contribute to effectiveness; and address the strengths and continuing challenges and possible avenues for improvement.

Chapter Four presents the range of data collected and analysed, under the categories indicated by the research sub-questions. Chapter Five considers this data in the light of the literature, using Chapter Two's key components of collaboration, to highlight both strengths and weaknesses of these elearning clusters as suggested by the literature. It finishes with a summary

based on the research sub-questions. My conclusions and recommendations are set out in Chapter Six.

I trust that this investigation throws some new light onto leadership of collaborative clusters and networks, and perhaps stimulates further research on and commitment to the VLN, (or any successor), enabling a more effective and sustainable future and a contribution to transformation of education in New Zealand.

to create an even better future.

(Hargreaves & Fink, 2006, p. 19)

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction to the review of international literature

A review of the literature addressing a particular field of inquiry is usually an inductive process which seeks to encompass and analyse the range of related themes and perspectives, identifying and focussing on the particular aspects that directly relate to the research question and context. Reflection, based upon an examination of published research and theoretical writings, enables the identification and understanding of the paradigms and trends in thinking which are most relevant to the research being undertaken.

As this study addresses leadership in collaborative clusters of senior high schools there is a dual context to address: conceptions of leadership for individual educational institutions; and leadership of or in clusters of institutions. This is because the collaborative goals of the cluster apply also to the individual institutions, and the leaders act in both contexts. More specifically, collaborative cluster goals may be enhanced or hindered by a leader's style or actions within their own school. Simply put: What makes clusters work? How can they be transformative?

The main research question is:

What are the most appropriate and effective models for managing and leading collaborative relationships and shared long-term projects for clusters of secondary schools?

There are three key aspects of the research question to address. The first aspect is 'leadership' (and its companion: management), by principals (head teachers) and non-principals in clusters and in their schools. The second is 'collaboration' as a leadership strategy, structural and developmental

process, considered in an innovation or improvement context. The final aspect to address is the 'effectiveness' of the collaborative developmental process, with a focus on long-term change and sustainable transformation.

This review of conceptions and practice of leadership and management of collaborative projects has three main sections. Part One initially addresses the context for leading educational reform, and establishes current moves towards collaboration as a reform strategy. It is intended that this will assist in an understanding and evaluation of collaboration as an essential reform strategy. Part One moves on to review in more detail the meaning and main dimensions of collaboration for effective transformation. This section is intended to detail the what and the why of collaboration, establishing what this strategy means in practice. Part Two focusses on the international literature about collaborative leadership: leadership that harnesses the power of collaboration. Leadership within schools, across or between schools, and across whole systems (countries) is addressed. Part Three considers particular collaborative models that some international organisations and education systems are using to transform themselves. The chapter concludes with a summary of the core issues for effective collaborative leadership that shaped the investigation and underpin the subsequent analysis.

Part One

2.2 Leadership for Transformation

This investigation's questions focus on leadership practices in cluster projects which seek, in one way or another, to improve the learning of students. The selection and evaluation (i.e. the 'appropriateness and effectiveness') of a chosen leadership or management model will depend upon the perceived educational context (the beginning state) and upon the change requirements or expectations (the degree of change and/or the intended goal). Some understandings of the current educational context and of inadequate prior reform efforts are reviewed first, followed by current perceptions of expected educational outcomes.

2.2.1 Failed educational reforms; the challenge to change teacher's practices

In one guise or another – improvement, effectiveness, change, transformation or innovation – reform has preoccupied education researchers, practitioners and the literature for over four decades (Fullan, 2007). Since early this century the expectations of 'transformation' have increased (Hargreaves, 2003) although many writers have noted that there have been only isolated examples of improvement. They conclude that the whole system needs transformation, still (Fullan, 2007; Hargreaves & Fink, 2006).

One of the major, widespread reform paradigms is 'self-management' (Caldwell, 2006b), one example being New Zealand's 'Tomorrow's Schools' based on legislation enacted in 1989, from which many other jurisdictions have followed suit (Fancy, 2005). However, while it has strengths, its limitations have been recognised for some time (Caldwell, 2006b), especially if reform at scale is expected (M Fullan, 2005). There have been a variety of reform trends, but it is now recognised that reform is a much more complex process than previously understood (Elmore, 1995; Fullan, 2007). Peterson, McCartney, and Elmore (1996) noted the core issue as failure to change teachers' practice:

... failure of existing governance structures and professional development programmes to affect the instructional practice of teachers marks their inability to enhance the knowledgeability and capability of teachers (Goddard, 2003, p. 34).

So what are the new underlying reasons for change and their implications for leadership strategies and leaders?

2.2.2 The need for transformation today

Large scale reform efforts are intensifying (Caldwell, 2006a) to meet the growing need for change. There are many changes in society which writers identify as significant, complex and paradigmatic (Collarbone & West-

Burnham, 2008; Drucker, 1993). Madsen and Mabokela (2002) support Drucker's view a decade prior, that society is in a major rearrangement phase, believing that "no other institution faces challenges as radical as those that will transform the school" (p. 209). According to Eisner (2004b) the scale of change is paradigmatic:

genuine reform of our schools requires a shift in paradigms from those with which we have become comfortable to others that more adequately address the potential that humans have for shaping not only the world, but themselves (p. 7).

The stimuli for reform include: learners and learning have changed (Caldwell, 2006b); we need to address the 'long tail' of underachievement (OECD, 2000) in New Zealand; the trend is to personalise all public services (Caldwell, 2006b; Harvey, 2004; Zuboff & Maxmin, 2004). It is time for self-managing schools to catch up with best practice (Goddard, 2003, p. 34). Also, this century's technological developments, including the meteoric rise of social media, are challenging traditional schooling, even the purpose of education (Jenkins, 2009). Previous reform strategies, including the pervasive standards and standardisation movement, have been rejected in favour of a range of new scenarios as in the OECD (2001) report Schooling for Tomorrow. System wide sustainable change is now an internationally recognised field of research (Hargreaves, 2010; OECD, 2010), with a focus on a variety of collaborative leadership strategies (OECD, 2008) across many nations.

Caldwell, in his definition of transformation, puts students at the centre of systemic change: "Transformation is considered here ... as systematic and sustained change that results in high levels of achievement by all students in all settings, thus contributing to the wellbeing of the individual and society" (2006b, p. 6). This then is the context – the widespread demand for systemic transformation – in which improvement projects based on collaboration need to be considered and evaluated.

2.2.3 How have ideas about transformation changed?

For Hopkins (2006), there will be a "new educational landscape" (p. 23). Fullan says we need theories of change that provide understanding of successes (or failure) and which provide motivation for widespread change (2007) in teachers. The old 'managerialist' paradigm (Gewirtz, Ball, & Bowe, 1995; Helsby, 1999; Wright, 2001, p. 281), and hierarchical leadership models (Collarbone & West-Burnham, 2008; Fullan, 2008b; Hargreaves, 2003) are specifically rejected, as they tended to produce only short-term unsustainable results, if any, and were certainly not motivational. Almost a decade ago Fancy (2005) supported developments in New Zealand when he stated that there will be a "more collaborative and networked system ... characterised by strong relationships", with schools seen as "archipelagos" rather than "isolated islands" (p. 16). Others refer to an ecological vision of joined-up systems thinking to address the complexity and wickedity of the challenges facing educators. See also Rosenzweig Collarbone and West-Burnham (2008) refer to the "profound implications" of the trend toward collaboration, for "institutional identity, the nature of governance and our understanding of the nature of leadership" (p. 62). (Fullan, 2008b; Pfeffer & Sutton, 2006) Hess and Meeks (2010) have supported 'structural unbundling' where schools are no longer 'siloed' due to new kinds of relationships and partnerships (Bolstad & Gilbert, 2012). It is this trend toward collaborative transformation, away from single institution and single leader approaches to reform, that is the focus of this investigation. With some understanding of the need for transformative change and of the international movement toward collaboration, we now consider what these mean in more detail.

2.2.4 How, why can collaborative clusters help transform schooling?

This second half of Part One addresses the meaning and practice of collaboration as an organisational theory and strategy for effective transformation of schooling. Collarbone and West-Burnham (2008) refer to Senge to support their contention that the theory of the 'learning organisation' (LO) has enabled a re-think of fundamental principles of organisational theory, leading to their focus on two key aspects:

relationships and structures. They "focus not on particular practices but on building collaborative relationships and structures for change" emphasising that we need "mechanisms and a process that allow people to talk, across grade levels, departments, and schools within a system" (Senge, 2000, p. 94). There are three main aspects of collaboration for transformation that will be addressed in this section: a rationale for collaboration; collaborative processes – various dimensions of collaboration; and aspects of effective collaboration.

2.2.5 The What and the Why of Collaboration

As above, Senge et al. refer to the two 'levels' of change: we will address collaborative relationships first. Collaboration is one of Fullan's six big ideas for educational reform (2008a). It is a highly skilled activity with the power to transform society according to Stagich (2001). Collarbone and West-Burnham state that this move to interdependency and collaboration "represents the greatest potential benefit to effective education but at the same time the most significant challenge to orthodox thinking about roles and relationships, structures and systems" (2008, p. 61). Shirkey shares insights on group interactions and effectiveness, as he describes a four-step scale or 'ladder' of group activities - from simple sharing through cooperation to collaboration and collective action (2008). Collaboration is more involved, as "it increases tension between individual and group goals" (p. 50). It takes commitment and is harder to get right, requiring negotiation which "takes more energy" (p. 51). For collaboration and collective action the negotiations are "necessarily more complex, because frequency, complexity, and duration of user interactions are higher" (p. 275). Fullan (2008b) argues for the development of collaborative cultures, recognising the need to develop collaborative capacity, for sustainable transformative change.

This complexity (both in context and as a relational process) is due in part to the interaction of people and society, as Fullan (2007) says "at the end of the day large-scale reform…involves simultaneously individual and social change" (p. 11). Collaboration is said to be more powerful in dealing with complex contexts where the hierarchical approach becomes incapable of

dealing with the diversity of knowledge and the learning required (Hargreaves & Fink, 2006). This pervasive collaboration at all levels of the system, is now a major trend (Fullan, 2003, p. 56) within the focus on leadership capacity building (Barber, Whelan, & Clark, 2010; Caldwell, 2006b, ch. 8-9; Fullan, 2010; Harris, 2013; Lieberman & Grolnick, 1996). Caldwell expects increased networking and changed leadership:

The new enterprise logic of schools includes ... (1) the success of a school depends on its capacity to join networks to share knowledge, address problems and pool resources; (2) and leadership is distributed across schools in networks as well as within schools" (2006b, p. 168).

Bottery, Wright, and James (2012) focus on moral leadership based on relational trust, rather than prescription, standards and leader characteristics. Relational trust has the capability of producing creative synergy, where rules become largely unnecessary, which is a key to effective long term change. Leaders need to foster culture change that recognises the social complexity involved in whole school, cluster, and whole system learning (Glatter, 2007). This investigation focuses on the new thinking and paradigm, the new organisational systems and leaderships which employ a range of collaborative strategies.

Collaboration also addresses another change issue. For individuals, change is always unsettling, involving "loss, anxiety, and struggle" (Fullan, 2008b, p. 21; Marris, 1975). Failure to factor this into a change theory or strategy can cause misinterpretation, and mismanagement of the 'conservative impulse' of teachers. Deep change requires that "people must be able to attach personal meaning to the [new] experiences" (p. 21), which is best done in community with peers (Fullan, 2007). These considerations lead Fullan (and many others, see p. 25) to regard transformation as a "reculturing [process] (how teachers come to question and change their beliefs and habits)", rather than "restructuring (which can be done by fiat)" (p. 25). Re-culturing is based on a "shared consensus about their goals" (p. 38)

where teachers are more likely to incorporate new ideas into their classroom practice.

Fullan (2007) noted Nonaka and Takeuchi (1995) who found that "collaborative cultures constantly convert tacit knowledge into shared knowledge through interaction" (p. 38). He agrees, referring to the need "to develop a *processual* relationship with each other", lamenting "the absence of regular interpersonal forums of communication" in many schools and systems (p. 100). They suggest that real collaboration is inherently transformational, as group interaction is essential to a meaning-making and the re-culturalisation process that can effectively meet the challenge of change. Growing this collaborative culture is a key responsibility of leadership; Fullan (2008b) agrees with Pfeffer and Sutton (2006), defining "leadership ...as a task of architecting organisational systems, teams, and cultures" (p. 200).

Chapman et al. (2010), with others cited by Briggs (2010), highlight the research that shows that collaborative strategies, such as federations and collaborative leadership styles, have a positive impact on student achievement. Exactly what collaborative processes and collaborative leadership entail deserves closer scrutiny.

2.2.6 Collaboration's dimensions

Collaboration is a key aspect of emergent organisational development theory (Hitt, Keats, & DeMarie, 1998; Pettigrew & Fenton, 2000). Regarding new educational systems and cultures, PricewaterhouseCoopers recently identified five broad models of school leadership in current practice. The last two of these are relevant: the Federated model, "characterised by varying degrees of collaboration between schools"; and the System Leadership model, which "embraces all the different roles that heads can assume beyond the boundaries of their own school" (2007, pp. ix-x). Regarding systemic leaders, Hopkins (2006), quoted in Caldwell (2006b) characterises them as principals who "are willing to shoulder system leadership roles: who care about and work for the success of other schools as well as their own" (p. 167). Both of these models have direct applicability

to the context of this investigation, so each is addressed more fully in the second half of this chapter. Further aspects of collaborative cultures are considered next: lateral capacity building; ineffective collaboration; and collaboration's relationship to modern views of learning.

Collaboration is also seen as a key mechanism for lateral capacity building, for both teachers and leaders. Hargreaves (2003) justifies collaboration because transformation can occur "by shaping and stimulating *disciplined* processes of innovation within the school system, and building an infrastructure capable of transferring ideas, knowledge and new practices *laterally* across it" (p. 12, italics in the original). The power of collaboration by teachers across clusters is explained by Hargreaves' rationale: "The innovation transfer works [between schools and teachers] when the knowledge involved remains embodied and contextualised in a working relationship that is co-creative for both participants" (p. 50). This is examined in more detail later under Strategies for systemic change (2.4).

However, though all collaboration may be powerful, not all collaboration is transformational (Fullan, 2007). Groups need to be well informed (be actually learning) and also to avoid 'group think', often due to a lack of diversity (Little, 1990). Scholars agree: it must be "collaboration focussed on learning, group as well as individual learning" (Caldwell, 2006b; Fullan, 2007, p. 151; Stoll, Bolam, McMahon, Thomas, et al., 2006). It must also be transparent: open and accountable (Fullan, 2008b). For teachers, the learning should be about how to improve student learning outcomes together; for leaders, it should focus on growing a learning community and increasing leadership capacity.

Collaborative development recognises that real learning as an interactional social process (Bereiter, 2002). Fullan (2007) says that "change consists of changes in beliefs..., which can come about only through a process of personal development in a social context." (p. 139). See also: (Brokensha, Warren, & Werner, 1980; DuFour, DuFour, Eaker, & Many, 2006; McLaughlin & Talbert, 2001; Stoll, Bolam, McMahon, Thomas, et al., 2006).

A closer look at dimensions of effective leadership and learning via collaboration is required next.

2.2.7 Aspects of effective collaboration

If collaboration is a key strategy, then addressing its effectiveness in practice is important. For example, Woods (2006) developed a rubric to gauge the likely effectiveness of collaboration by considering the degrees of penetration of collaborative systems within an organisation. The requirements for effective collaborative leadership are now addressed from several viewpoints. These are: the sustainability of change; changing the behaviours of teachers; and organisational change via a culture change toward a learning organisation (LO). Also, effective resourcing and connectivity are mentioned, along with consideration of collaboration's embedded accountability features. The place of shared leadership in relation to educational transformation is introduced. Lastly, collaboration's relationship to social change is briefly developed.

How can development be maintained over time? Collaboration is one of Hopkins (2006) four drivers of change. Fullan, among many others, points to the establishment of an internalised shared vision, to which teachers will be committed over the long-term (Fullan, 2006, p. 20). Leading researchers and writers agree that mandated reforms can produce only small improvements and that these are short lived or soon reach a plateau (Fullan, 2007; Hargreaves & Fink, 2006; Hargreaves, 2003). In contrast, collaborative learning, or "lateral capacity building" (Fullan, 2007, p. 56), has produced much better and longer-term improvement, according to his review of large systems internationally. Three of Munby (2003) "priorities for sustainability" address collaborative cultures and cluster-based work, where everyone is a "leader of learning" (p. 2). Leading and learning together is at the heart of collaboration for sustainable transformation. Organisational learning (or Learning Organisations, LO) are reviewed in more detail later.

Changing the beliefs and behaviours of teachers (i.e. their classroom practice), is the core requirement of a change model (Deutschman, 2005;

Kotter, 1996). Schlechty (1988) focused on the nature of teachers' involvement in the change process:

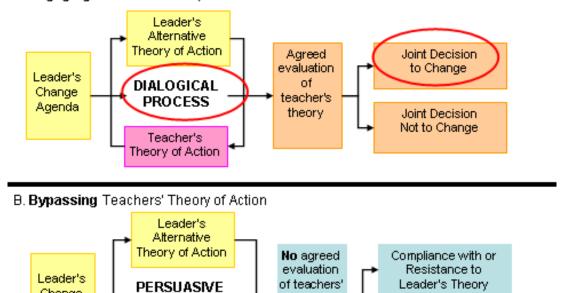
for change to occur, it is essential that those who are most directly affected by the change be involved both in defining the problem and in identifying the solution; even more important, they must perceive themselves as being involved (p. 187).

Fullan emphasises the motivating power of such collaborative strategies (2007). Senge (1990) emphasised dialogue as the first key strategy: "The discipline of team learning starts with 'dialogue', the capacity of members of a team to suspend assumptions and enter into a genuine 'thinking together'" (p. 10) or 'open-to-learning' conversations. The critical fundamental solution is "reflective openness: developing the skills of inquiry, reflection, and dialogue" (p. 278). Robinson (2007) graphic diagram highlights the 'dialogic process' as the key to transforming teachers' beliefs and practice, their 'theory of action' (see the two circled aspects in Figure 1 below).

A. Engaging Teachers' Theory of Action

Change

Agenda



theory

Adaptation of Teacher's Existing

Theory

Figure 1 Engaging teachers' theory of action (Robinson, 2007)

PROCESS

Teacher's

Theory of Action

Dialogue is claimed to be especially powerful where "new learning challenged teachers' existing understandings" (p. 174ff), their mental models (Senge, 1990), requiring "deep engagement" leading to "coconstruction" of an alternative theory of practice (Robinson, 2007, p. 17), (Bate, Bevan, & Robert, 2005, p. 24). To Robinson this indicates a dependency on relational trust (Robinson, 2007, pp. 19-20), rather than use of hierarchical power and persuasion (see Figure 1, diagram B) as the supposed means to transformation. Hargreaves and Fink (2006) analyse several failed large-scale reforms which were based on 'command and control' strategies. Senge (1990) emphasised that an hierarchical approach is "antithetical" to dialogue (p. 245). According to Bohm (1990), guoted in Senge (1990), the power of dialogue is that it is creative, where "a group accesses a larger 'pool of common meaning', which cannot be accessed individually" (p. 240-241). Fullan (2012) claims collaborative processes are more efficient because social capital generates human capital faster. According to the Barber et al. (2010), collaborative practice has the power

to develop a normative model of 'good instruction' across the institution or system.

Sustainability also addresses resourcing issues which arise with the more complex collaborative strategies to ensure real culture change where innovation is embedded and shared (Caldwell, 2006a). He points out that "traditional single-school-focussed, needs-oriented and formula-based approaches do not take account of the necessary costs of networking" (p. 87). Briggs (2010) highlights the need for an equitable, sustainable funding system for collaborative projects and that the OECD (2008) recommended that nations develop not only models for distribution of leadership but also support systems for collaboration system wide. Governments need to recognise the additional costs and support requirements for lateral capacity building and distributing leadership in largely autonomous school systems (Collarbone & West-Burnham, 2008) (OECD, 2008).

The practicalities of connecting teachers between schools/across a system are also a challenge. For New Zealand, Bolstad and Gilbert (2012) recognise that schools require additional resources to enable teachers to collaborate effectively, enabling (rather than constraining) networking and cluster-based learning and sharing best practice. The most recent report from the OECD, (Schleicher, 2012), Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from around the World, notes that their data shows teachers have "relatively infrequent collaboration with colleagues" (p.47) and that some countries are encouraging teachers to engage in cooperation by providing them with scheduled time. A strategy supported from the top, as in Ontario (Fullan, 2010), properly designed and resourced to enable educators to collaborate, rather than one that merely creates opportunities for some early adopters or enthusiasts via new technologies (e.g. the VLN in NZ), would have a greater chance of creating sustainable system wide improvement.

Can collaborative processes be accountable? Accountability attempts to ensure or at least measure effectiveness. Fullan (2007) often refers to the question of "not too tight/not too loose" problem (p. 11) associated with accountability systems; of getting the balance right. 'Too tight' refers to top-

down system-wide controls via standards, where the system or leader attempts to "...use the measurement tail to wag the performance dog" (Fullan, 2008b, p. 93), where judgementalism is dominant. 'Too loose' refers to relying on bottom-up independent innovation, which can empower pockets of innovation but "does not produce success on any scale" (Elmore, 1995; Fullan, 2007, p. 20). Hopkin's fourth 'driver' is "intelligent in which external accountability becomes accountability, onerous...while internal accountability gets built up." (2007, p. 245). Many researchers and writers believe that collaboration (in learning and leading together) is inherently accountable.

Fullan has repeatedly asserted that lateral capacity building "...pays enormous dividends..." (2007, p. 56), (2005; 2006); that "this network or cluster-based strategy can do double duty", and that "there is no stronger accountability than when it is reinforced daily with peers working on important problems in which internal and external transparency is evident" (p. 56). Fullan describes the balance this way: "When data are precise, presented in a non-judgemental way, considered by peers, and used for improvement as well as for external accountability, they serve to balance pressure and support" (2008b, p. 91).

Briggs (2010) links accountability to government resourcing: her Figure 13.4, reproduced below in Figure 2, illustrates her proposal that "a necessary starting-point for collaborative leadership is where government policy, and its associated resource, creates conditions for collective accountability and responsibility" (p. 249).



Figure 13.4 Beneficial conditions for collaborative leadership

Figure 2 Brigg's conditions for successful collaboration (Briggs, 2010, p. 250)

According to these practitioners and researchers, accountability is different and can be more effective under a collaborative paradigm.

Most writers have now moved away from the single leader (and single institution) emphasis so typical of the past. Briggs (2010) summarises current international thinking when she states that "multiple 'layers' of leadership across partnerships need to be understood, accommodated and nurtured"; she also considers a range of "tensions, barriers and ambiguities" (p. 246) and "beneficial conditions" for "new models" of collaborative leadership, modelling the aspects of collaboration (vertical and horizontal), that need to be addressed. The Department for Education and Skills (DfES) (2003) notes that success in collaborative practice "was attributed to the partner's conscious efforts to achieve equity and commonality, which 'contrasts with the hierarchical and positional power-based roles and relationships so often in evidence'" (p. 45). We return to a more detailed look at various types of non-hierarchical leadership in a later section.

Growing the context for reform (from school to whole system) is a significant change of scale, but some writers also expect that transformative learning will have an impact on society as a whole (Leithwood, Jantzi, & Steinbach, 1999, p. 204). For Fullan, Cuttress, and Kilcher (2005), moral purpose is about improving society through improving educational systems and consequently the learning of all citizens. To Eisner the required reforms are more than world-changing:

we will realise that genuine reform of our schools requires a shift in paradigms from those with which we have become comfortable to others that more adequately address the potential that humans possess for shaping not only the world, but themselves. (2004b, p. 10)

Foster (1989) regards educational administrators as critical humanists, who act *on* the system as well as within it. Caldwell (2006b) and Madsen and Mabokela (2002) agree. Critical theorists argue that leadership:

is and must be socially critical, it does not reside in an individual but in the relationship between individuals, and it is oriented towards social vision and change, not simply, or only organizational goals (Foster, 1989, p. 46).

These writers suggest that democratic culture should be challenged and improved by any true transformative leadership and learning process. This often forgotten aspect needs closer examination, being intertwined with the modern vision of educational change processes.

2.2.8 Socio-political context – paradigms

Greenfield (1999) and Foster (1989) agree that school administrators need to be critical humanists, who can develop critically reflective leaders who can contribute to the formation of citizens (Bottery et al., 2012; Fullan, 2006;

Grace, 1990; Thrupp & Willmott, 2003). Recognising the system's requirement for more leaders and leadership development, many educational systems have developed new leadership training or development programmes (e.g. the NCSL in England, Caldwell (2006a)). However, these programmes have been challenged. Glatter quotes Gronn who argues that "government agencies were 'customising their requirements by accrediting individuals according to standards-determined profiles of preferred leader types' (Gronn, 2002, as cited in Glatter, 2003, p. 216) – linked to the ideology of the new managerialism" (Glatter, 2003). This has been termed 'designer leadership' (Thrupp, 2005), which Wright called 'bastard leadership', as the programmes raised "worrying questions which threaten to undermine these twin aims of a 'healthy and just democracy [and] a productive economy' (Department for Education and Skills & Qualifications and Curriculum Authority, 1999)" (Wright, 2001, p. 276). The moral basis and value-examination orientation regarding the direction of schools and society seemed to get removed from such government funded programmes (Wright, 2001), weakening their transformative potential. How leadership might be effectively grown, shared, perhaps even developed in all participants, and what sort of leadership is required to achieve this, is a major thrust of the rest of this review.

Part Two

2.3 Leading or Managing Change?

The study of leadership and management is a "veritable 'Tower of Babble'" (Kent, 2005, p. 10), with no clear consensus regarding simple distinctions between leadership and management. Some writers use 'management', 'leadership' and 'administration' as synonyms in the same sentence or work. A range of views are expressed by writers such as Duignan (1987), Zaleznik (1989), Storey (2003), McCrimmon (2006), Kent (2005), Caldwell (2006b), Pettigrew and Fenton (2000) and many, many more. A useful analysis, written for the England government by Webb, Vulliamy, Sarja, and Hämäläinen (2006), quoting Lawlor and Sills (1999), sum their relationship up this way:

Leadership tends to be defined as 'developing and sustaining a shared vision and set of values in an organization, providing clear direction, and most crucially motivating others and releasing their energies, commitment, ideas and skills' whereas management is about 'ensuring that tasks are completed through effective planning, organization, supervision and the deployment of human and other resources' (p. 53)" (p. 409).

Since writers like Harris and Day (2003) have recognised that "traditional leadership [including management] approaches have had little, if any, direct or sustained impact on organisational effectiveness" (Harris & Day, 2003, p. 76), a brief closer look into some general conceptions of these terms within a transformative context, seems very important. Following that is an examination of major types of leadership supporting collaborative transformation, including distributed leadership, and the emerging models of system leadership. The more recent resurgence of conceptions of moral leadership is also addressed at the end of this section.

2.3.1 Definitions and uses of terms

Management and leadership are often used interchangeably, although management is more often associated with maintenance of the status quo or mechanistic systems. Managerialism is the term used by commentators where "The main belief ... is in the value of management; that better management should lead to a better world, economically and socially" (Wright, 2001, p. 281). Sergiovanni (1993) described the managerial mystique this way, "doing things right, at the expense of doing the right things" (p. 4), where efficient controls of human behaviours and other resources have tended to be the focus of management processes, rather than addressing the need for improvement, innovation or creative change. Wright recounts the view dominant in decades of literature, that the management paradigm sees social progress as being "attained through the use of disciplined workforces and, for management to bring this about, managers must have the 'right to manage" (p. 281), a view based on Taylorism (or Fordism), sometimes called scientific management. Wright suggests that "managerialism privileges some and rejects others" which

"requires the obedience of the managed to the dictates of the manager" (2001, p. 281), which is clearly inadequate if in fact systemic paradigmatic change is required. Management is not usually associated, in the literature, with transformative change although few argue for the abolition of such a role; they are usually seen as partners, and preferably go hand in hand in all school administrators.

Leadership is usually given the connotation of direction setting and exercise of influence for change in an organisation (Caldwell, 2006b; Cuban, 1988, p. 6; Robinson, 2001, p. 6). Knowledge-based leadership, from anywhere in the community or system (McCrimmon, 2006, p. 58), more easily promotes the engaging of non-managers in innovative practice, but executives and managers (such as CEOs, principals) will need to release their power and controls, instead focusing on leadership development for all. Caldwell sees principals as the main influencer and resourcer of learning, having the "ability to nurture a learning community ... helping teachers ... gain state-of-the-art knowledge about what works for each and every student" (2006b, p. 120). McLaughlin and Talbert (2006) agree, adding that principals "also spread and develop leadership" (p. 162-163). As Mintzberg (2004) has written:

Successful managing is not about one's own success but about fostering success in others (p. 16) ... While managers have to make decisions, far more important, especially in large networked organizations of knowledge works, is what they do to enhance decision-making capabilities of others (p. 38).

In the last decade the emphasis has moved from the single 'leader' at the top to a more general and shared 'leadership' requirement, with various conceptions of distributed leadership in, across and between organisations. Bottery et al. (2012) note the increasing recognition internationally of the "moral, contextualised and distributed nature of leadership" (p. 227), a clear move away from individualistic hierarchical leadership.

Caldwell and Harris (2008) have highlighted the social and intellectual capital aspects of governance and leadership, helping with the understanding of a new governance paradigm; 'Learning Systems' (p. 17),

(Glatter, 2003x). The learning system is based on the concepts of organisational learning (Senge, 1990) as mentioned previously, and 'networking [of] professional knowledge' (Caldwell & Harris, 2008, p. 17). A 'learning organisation' approach is described as a 'developmental' perspective requiring "genuine partnerships built on trust" (pp. 18-19). Its integrating force is "a climate of trust and tolerance" (Glatter, 2007), and the emphasis is on the "quality of relationships" (quoted in Caldwell & Harris, 2008, p. 18). Schleicher (2012) states that an international review shows "supporting collaborative work cultures is an increasingly important and recognised responsibility of school leaders" (p. 19); that "leadership at the school level must be better distributed" (p. 20).

This leads us to a closer consideration of the nature of some newer leadership roles, for the principal and others, and how these relate to effectiveness of transformation of schools and systems.

2.3.2 Review of some key conceptions of Leadership

This section considers the applicability to collaborative contexts of: principalship; 'instructional leadership'; 'transformational leadership'; teacher and system leadership; and moral leadership.

In Fullan (2003) the focus was on the principal's role to transform schooling. Earlier research focused on, or assumed, that leadership is equated with the principal's role alone (Hargreaves & Fink, 2006); 'leader' was often a synonym for 'principal', often with a 'heroic' leader connotation. Hargreaves and Fink, with a growing body of colleagues, summarily dismiss heroic leadership: "for the most part, the heroic leadership paradigm is a flawed and fading one" (p. 96). With regard to school reform, the principal's role is typically referred to as 'instructional leadership' in the North American setting, where they tend to lead mandated instructional development programmes (Hallinger & Heck, 1996; Leithwood & Duke, 1999; Marks & Printy, 2003; Spillane & Seashore, 2002) under their District Supervisors. The North American use of instructional leadership is said to have a control orientation, to implement district or state mandated 'best-practice' programmes, or the principal's assumed expert version, of instructional

methods (Marks & Nance, 2007, p. 9). Many now prefer other terms, including pedagogical leadership or learning leadership (Fullan, 2010; Hargreaves & Fink, 2006). Writers like Lambert (2002) focus on the leadership of learning role where all teachers are empowered to transform education by the principal's actions. Fullan (2007) and Leithwood and Jantzi (1999) assert that a principal's role is to support teachers in their leadership roles, building capacity for leadership. For some there is a sense of partnership in responsibility for leadership: Elmore (2006) conceives the principal-to-teacher relationship as one of 'reciprocal accountability', while Spillane (2005), who has a social theory approach, concludes that "leaders act in situations that are defined by others" (p. 145). More recently the OECD report (Schleicher, 2012) documented a range of national strategies for promoting distribution of leadership, and of growing discussions about a set of model standards for teacher leadership.

'Transformational' leadership would appear to have relevance, at least on a semantic level, as systemic transformation is the context for this study. Leithwood and Jantzi (1999) revealed that the most common type of 'leadership' in selected journals was transformational leadership. They categorised a set of characteristics (p. 128), as did Leithwood et al. (1999, p. 146) and Burns (1978) that appear to be relevant to collaborative contexts. However, some criticise the conception of transformational leadership as too focussed on the single hero leader, which has fostered the traditional hierarchy and reliance on followership. Perhaps it is time to move on from this term and its limited conception of leadership as well.

As indicated already, the emphasis has changed toward shared and teacher leadership, directly related to building capacity for leadership at all levels in the school and system (Hargreaves & Fink, 2006). This has been widely supported since it was shown that teacher actions (and leadership) have a much more significant and direct impact on student learning than that of the principal (Hargreaves & Fink, 2006; Leithwood & Jantzi, 1999). Many writers (such as Munby (2003) point out that teachers must own proposed changes in order to have intrinsic motivation and commitment and are more likely to do so if they were involved in defining the problem

and designing the solution. Within a learning organisation the central premise regarding leadership is that it is ultimately about leading learning, at all levels in the system, cluster, and school (Copland & Knapp, 2006, p. 17; Fancy, 2005, pp. 16-17; Kouzes & Posner, 2002). This leads to the need for a closer consideration of distributed leadership; principal and teacher involvement in system leadership; moral leadership, and each one's relationship to school improvement. These newer conceptions of leadership, which have a 'collaborative bent' as represented in current research and literature, are reviewed next.

2.3.3 Leaderships for collaboration

Distributed, system and moral leadership are considered in more detail.

2.3.3.1 Distributed Leadership (DL)

The talk and the move toward distributed leadership has been a significant trend in business and education over the last decade (Day & Harris, 2001; Elmore, 2002). At its simplest, leadership is fostered at all levels in the organisation, building leadership capacity, thereby increasing the 'leadership density' (Lambert, 1998; Sergiovanni, 2001), or generating a 'leaderful community' (Raelin, 2003), within the school or cluster. Fullan (2003) considers DL critical for a principal's success: "You cannot have highly effective principals unless there is distributed leadership throughout the school. Indeed, fostering leadership at many levels is one of the principal's main roles" (p. 24), and, along with others, extends the distribution of leadership to networks between schools as well (Caldwell, 2006b, p. 87). Some call for a "serious distribution of leadership", as they regard this as fastest way to transformation (Harris, 2005b) and (Caldwell, 2006b, p. 160). Designing system-wide DL roles and providing supports is a recommendation from the OECD surveys (Schleicher, 2012), based on data from a wide range of countries, if others want to see the same improvement in student achievement as the world's best.

There are a variety of a meanings attached to the idea of DL but we will focus on its distinctive place and importance, rather than its detailed practice. Hargreaves and Fink (2006) detail a continuum of DL calling it also "facilitative leadership" (Hay Group, 2004, p. 4), while Spillane (2006) calls it holistic and synergistic, where it consists of the practices of multiple leaders, in the leaders' and followers' interactions with their situation (Dexter, 2011). Harris, a strong advocate for DL, has also examined common barriers to effective DL, emphasizing the need to address culture (a change away from top-down models) and structure within schools: "it is about creating the conditions where professional knowledge and skills are enhanced, where effective leadership exists at all levels" (2012, pp. 400, 401). According to Jackson and Temperley (2007) schools are unlikely to transform themselves without distribution of leadership roles.

There is a range of conceptions and practice of distributed leadership; some examples follow. Hargreaves and Fink's 'thermometer scale' of leadership styles has five steps between the extremes of autocracy and anarchy, listed as: traditional delegation, progressive delegation, guided distribution, emergent distribution, and assertive distribution (2006, p. 113). Gunter, (2001, p. 69) puts the significance of this trend towards shared or distributed leadership this way: it has the potential to broaden our understanding of school leadership beyond the "privileged power structures that emphasise a leader-follower dichotomy and authority, power and influence with individual organisational role" (as cited in Youngs 2007, p. 3). Figure 3 is a diagrammatic summary of the variety of leadership forms as developed by Youngs, where 'distributed' is placed within the wider leadership context and has a range of possible expressions based on the management paradigm employed.



Figure 3 Distributed forms of leadership (Youngs, 2007)

Hargreaves (2003) emphasises that "the primary function of a head is to ensure that as many people as possible have been given leadership opportunities to increase and mobilise the school's intellectual and social capital" (p. 25).

However, a note of warning is sounded by Gill (2008) based on research conducted by Petrov (University of Exeter, Centre for Leadership Studies) of 12 UK universities, and interviews with 152 of their managers. They describe a 'shadow side' to the 'fashionable leadership model', with the warning that it may challenge established notions of collegiality and consensus decision-making. Petrov's concern was that: "distributed leadership may be used by those in positions of real power to disguise power differentials, offering the illusion of consultation and participation while obscuring the mechanisms by which decisions are reached and resources distributed" (p. 1). Consideration of the politics and actual devolution of power involved in each case, not just the "rhetoric" (p. 1) used to justify changes in organisational structure, is encouraged. As Fullan (2008b) put it: "It is hard to build a system where others can succeed if the

leader believes he or she needs to make every important decision, and knows better than everyone else what to do and how to do it" (p. 126-127).

Others specify that leadership is best expressed as "widely dispersed leadership among *teams*" (Caldwell & Spinks, 1986, p. 19). Copland and Boatright (2004, p. 766) and Gronn (2000, p. 70) refer to benefits of teacher-leadership as being commitment to action, adaptability, and importantly, group accountability. More recently, Martin has pointedly stated in an interview with Alboher (2008) that "for the younger RenGen [renaissance generation] their agenda is to collaborate, to connect and to create. They don't respond to directive. They respond to teaming – where a boss puts a question or problem on the table and everyone can jump in" (p. 1). It was recognised some time ago by Senge (1990) that "teams, not individuals, are the fundamental learning unit in modern organisations" (p. 10). While supporting the move toward shared leadership in teams and collective decision-making, Martin (2008) points to the "exponentially" increased need for training and development, for the "vertical leaders" as well as "team members" (p. 405).

Many writers point to principal and teachers becoming leaders of learning together. According to Harris (2005b), "It is not about giving others tasks or responsibilities [mere delegation] but recognising that leadership practice is constructed through shared action and interaction" (p. 9). A constructivist paradigm (Lambert, 1998, 2002) emphasises teachers, and principal, learning together as a community as the key to deep change. Teachers are being empowered to lead the development of learning strategies within schools (Zmuda, Kuklis, & Kline, 2004). The move is toward 'leaderful' organisations, with the recognition that capacity-building is the necessary corollary.

2.3.3.2 System leadership (SL)

Caldwell et al. (2008) point out that outstanding practice does not happen through energies and expertise generated at the school level alone, that leadership across clusters beyond the individual school is vitally important (p. 53). System leadership is a relatively new term being applied to leadership in these cluster and partnership arrangements, as well as the wider system (Collarbone & West-Burnham, 2008). According to (Hopkins, 2006): "System leaders' are those head teachers (principals) who are willing to shoulder system leadership roles: who care about and work for the success of other schools as well as their own" (p. 6). System leadership thinking requires significant reflection and change: "The movement from autonomous institution through networks and clusters to federations requires a parallel shift in the scope of leadership and the perceived components of the role" (Collarbone & West-Burnham, 2008, p. 20). The Innovation Unit et al. (2007) paper emphasised that "the concept of system leadership is a move towards a more deliberately collaborative and interdependent system ... This is also a move away from headship or institutional leadership and towards educational leadership" (p. 3). PricewaterhouseCoopers LLP (2007) support this view (p. 10).

Working across as well as in schools is more complex and offers a wide range of possibilities. Hopkins (2007) details five emerging system leadership roles (p. 14-15), while Collarbone and West-Burnham (2008, p. 18ff) have eight in their typology, all of which a school principal may demonstrate. They also recognise that some SL roles are possible for deputy principals (p. 18). They emphasise that SL is not conceived within an hierarchical paradigm, rather it is a "portfolio of activities" (p. 15) within a collaborative paradigm. The various roles for system leaders address quite flexibly the range in school types and needs, and the challenges of transformation across the system, as illustrated by Hopkins (2007).

Various requirements and abilities of system leadership are provided by researchers and writers, including: remodelling to build capacity; releasing power and control (Carter & Sharpe, 2006, p. 6); building capacity for leadership (Hopkins, 2007, p. 20); informed professional judgement - knowledge-rich professional judgement (Barber, 2002; Fullan, 2003); and professionalism that "reject[s] the notion of 'hero leadership'" (Barnes, Coleman, Creasy, & Pearson, 2005, p. 1). While they do exhibit "qualities of drive, determination, self-confidence and strength of personality" (p. 1),

their practice tends to emphasise teamwork (p. 1), distributed models of leadership, and building that capacity, across a federation and the whole system (Collarbone & West-Burnham, 2008, p. 14). Collarbone and West-Burnham zero in on the absolute requirement for relational trust (p. 91) for system leadership to be effective.

More practically, Fullan notes that such leadership is collaborative rather than prescriptive (2007, p. 213). He suggests that a system leader must "establish conditions for collective focus and commitment, where educators feel and act responsibly for the system of schools, not just their corner of the action" (p. 228). System leadership is a vital component of effective cluster or partnership arrangements, but requires "the acceptance of a new paradigm of leadership, a different mental map of what it means to be an educational leader in addition to being a school leader" (Collarbone & West-Burnham, 2008, p. 24). CEOs or directors of federations often see themselves as chief facilitators (Chapman et al., 2010) who create contexts for deep conversations amongst colleagues.

In summary, researchers and writers agree that school systems need many more leaders, that all teachers may be leaders, that principals and others may lead beyond their school, and that these new leaderships are shared and collaborative not hierarchical. So where do these system leaders, and indeed principals or teachers who collaborate with various levels of colleagues, get their authority and mana¹ (Māori word, here meaning integrity, dignity or respect) – if it is not from their superior, hierarchical, management position – if they specifically eschew command and control leadership strategies? The answer lies in the values that the leader embodies, and their moral leadership.

2.3.3.3 Moral Leadership

Wagner and Simpson (2009) point out the obvious when they state that there is a significant difference between "leadership that focuses on the

¹ mana – in this context used to mean integrity, dignity or respect.

apparatus of control and leadership that focuses on the development of community" (p. 113), emphasising that schools and communities each have moral architectures. Many are moving away from "visions of a single transformative individual leading the workforce in the delivery of national standards through trained sets of competencies, towards both a more contextualised and value driven approach" (Bottery et al., 2012, p. 227). Allied to this idea of moral architecture is the concept of value-driven or moral leadership - education is by its very nature a moral endeavour according to Greenfield (1999) – and its relationship to collaborative school improvement. It is the relationship building based on shared values that is at the root of the deep cultural change required for sustainable school improvement which many emphasise (Fullan, 2003). Greenfield (2004), noting Starratt (2004), has argued that a major part, a second order priority, of a principal's moral responsibility is to help the school define and develop itself as a learning community to meet its challenges. Bryk and Schneider (2002) also connect relationship building to trust and student outcomes: "as a social resource for school improvement, relational trust facilitates the development of beliefs, values, organisational routines, and individual behaviours that instrumentally affect students' engagement and learning" (p. 115).

Trust is significant as it facilitates public problem solving and risk-taking; a highly efficient form of social control that out trumps top-down control mechanisms for effectiveness in developmental contexts (Fullan, 2003). Over 20 years ago Sergiovanni wrote extensively about "leadership by bonding" to help one's people "transcend competence for excellence by inspiring extraordinary commitment and performance" (1993, p. 24), where leadership is "not so much doing but being and serving," and "inviting others to share the burdens of leadership" (Sergiovanni, 1994, p. xix). Palestini (2011) in Leading with Mind and Heart prefers to talk about developing a covenantal, as opposed to a contractual, relationship, with employees "essentially treated as volunteers", enabling others to reach their potential through participative decision making (p, 252). Greenfield (2004), in his review of the history of writing on moral leadership, sums the point of leadership this way: "The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and

may convert leaders into moral agents ... the kind of leadership that will produce social change" (p. 176). For Michael Fullan (2005) the expectation is that school leaders must be "change agents in collaboration with others" (p. 64). Lennick and Keil (2011) developed a set of moral competencies, highlighting compassion and forgiveness, whereby followers 'forge a bond' with their leaders. Some collaborative options for innovative principals, teacher-leaders and governors seeking to develop leadership in others for sustainable organisational development are reviewed next.

Part Three

2.4 Strategies for systemic change

We now review some particular, practical examples of systemic change strategies – how the theory is being applied in practice or how particular practices inform theory. "Improvement at scale is largely a *property of organisations*, not of the pre-existing traits of individuals who work in them" (Elmore, 2000, p. 25). Generally, this section addresses how an organisation's structures and systems, at various levels, can be developed by principals or system leaders in order to foster effective collaboration for transformation.

2.4.1 The Learning Organisation: lateral capacity building

The Fifth Discipline by Senge (1990) firmly established the 'Learning Organisation' (LO), based on systems thinking, as an organisational paradigm in the minds of many (Collarbone & West-Burnham, 2008, p. 13). Fullan directly relates sustainable change to learning organisations (2008b). Writers agree that is a direct relationship between increasing leadership by all and capacity building, with that connection being collaborative learning. This includes collaborative cultures vertically as well as horizontally: "the goal is ... to establish *permeable connectivity*" that is, "plenty of two-way interaction and mutual influence within and across the three levels" of the tri-level model (p. 236). Leading learning for the community breaks dependency on the leader, even co-dependency (Lambert, 1998, p. 25). It builds the community's capacity for leadership, and sustainable transformation. Lambert's (1998) definition separates leadership from a

person or position and equates it to community learning: she defines leadership as "reciprocal, purposeful learning in a community" (Lambert, 2002, p. 2). Lambert's means of 'influence' is through guiding and supporting the learning of the community of teachers to enable them to develop their own (independent and collective) shared vision, their teaching paradigm, and their initiative. Supporting this orientation, the meta-analysis by Robinson, Hohepa, and Lloyd (2009) identifies the leadership dimension, for principals, of 'promoting and participating in teacher learning and development' as having double the effect size (0.84) as compared to the next highest dimension.

Fullan (2007) adds the further dimension, of clusters or districts, to this when he refers to 'culture change', 'cross-school learning' and 'inter-school learning' being "crucial"; that it is not just a programme or innovation (2007, p. 152) if transformation is the goal. He also quotes Munby (2003) with a list of a number of 'priorities for sustainability', including "new leadership", "cluster-based work – action learning", and "embedding a culture of coplanning...everyone a leader of learning (p. 2)" (p. 226). There is good support for leadership capacity building, across clusters, vertically and horizontally, that is focussed on learning together, strategically resourced by the existing leadership. Next we look at two particular well researched models for peer-to-peer learning – learning networks and communities of practice.

2.4.2 Peer collaboration models

The moves across many sectors towards horizontal peer-to-peer networks may best be illustrated by Pettigrew et al.'s (2003) large-scale international INNFORM research. It was designed to examine innovative forms of organising practiced in some international companies (p. xii). They summarised three key trends in the practice-based literature thus:

first, the emphasis on greater permeability of organizational boundary and the development of networks, co-operative relations and alliances within and between organizations; secondly, the trend to flatten the hierarchies of more traditional organizations and to build more co-operative forms of managerial style; and thirdly the associated drive to develop more creative, responsive and learning orientated organizations which could cope with the tougher competitive conditions at the end of the twentieth century (p. 7).

Generally, their conclusions support the concept of a learning organisation (p. 8), that the "deliberate cultivation of cross-unit teams and cross-unit communications are key functions" (p. 13) for leaders to support. Noted here also is their view that "new forms of organizing may have to proceed in a systemic and related way and not in a piecemeal fashion" (p. 21), due to the 'relatedness' of the various change features. Collarbone & West-Burnham point out that working in networks, such as the NCSL Networked Learning Communities (England), is a "transformative strategy" as well as a context for system leadership (2008, pp. 62-64).

Another common strategy is the popular movement towards "communities" of practice" (CoP) (Snyder & Briggs, 2003, p. 4). The theory of communities of practice originated in the social science research by Lave and Wenger (2008) in their work on learning theory based on their studies of apprenticeship systems. They coined the term to "refer to the community" that acts as a living curriculum" for the apprentice learner (p. 4). Wenger explains the characteristics causing the trend toward using CoPs to develop strategic leadership capabilities: they "enable practitioners to take collective responsibility for managing the knowledge", "being in the best position to do this", they "create a direct link between learning and performance", in particular addressing "dynamic aspects of knowledge creation"; and they typically "form across organisational and geographic boundaries", contributing to "borderlessness", a feature of innovation and creativity (Wenger, 2008, p. 3). He believes that CoPs can catalyse peer-to-peer learning networks on a national scale and thereby achieve results not otherwise possible. This is because CoPs, "address the "local" (or "situated") (Lave & Wenger, 1991) nature of knowledge—as well as issues

related to skill and will" (Snyder & Briggs, 2003, p. 11). The efficacy of CoPs for educational transformation and leadership is also explicitly supported by other researchers (Fink & Resnick, 2001) (Snyder & Briggs, 2003, p. 11).

Other organizations and researchers use a variety of terms to describe similar phenomena, including "learning networks," "knowledge communities," "competency networks," "thematic groups," (Wenger, McDermott, & Snyder, 2002, pp. 239-240). These similar conceptions centre on the more 'loose' types of organisation, typically with an innovatefaster bias. The internet has made the world flat (Friedman, 2006) enabling new and widespread connections (regional, national and international), increasing the options available to collaborate and the speed of knowledge dissemination. Learners in communicating organisations are finding easier to connect with their peers to share and maintain their edge. Wenger (2008) defines communities of practice (CoPs) as, "groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (p. 1), while Snyder and Briggs extend this to also include building "organizational and societal capabilities" (2003, p. 5). They add: "The 'theory of the case' is that these communities are a linchpin for moving from centralized government to distributed", "engaged governance groups" (Snyder & Briggs, 2003, p. 41) at a local level. Annan (2006) lists five levels of relationship for CoPs to their host organisation: unrecognised: bootlegged; legitimised; strategic; and transformative, seen as central to success. In the latter, the CoP is seen as "capable of redefining its environment and the direction of the organisation" (slide 4). Clearly CoPs can make a real difference at grass roots level, with the right types of support.

Kodama (2000) reported his research on the systematic creation of strategic communities in large organisations (e.g. NTT – Nippon and Telegraph and Telephone, Japan's largest telecommunications carrier). He refers to the usefulness of an exceptional leader with "the heart of an in-house enterprise intrapreneuring promoter (e.g. Bechard, Goldsmith, & Fesselbein, 1996) who uses his innovative leadership to form "in-house business communities, enter[s] strategic partnerships with other businesses, and outsourcing

strategically" (Kodama, 2000, p. 191). This appears to be system leadership (across units), supporting CoPs (across units) within a large organisation. Interestingly, Kodama indicates that this can be done by "building an organisation contained within, but separate from, the main organisation" (p. 191). The evidence is that system leadership is the partner of CoPs if system-wide transformation is the required outcome.

Although this new organisational pattern has been "extremely effective for strategic innovation" (p. 191), Kodama points out that there are always problems. There are "issues related to joining and achieving long-term harmony between cultures of the old and the new organisations" (2000, p. 191). Roberts (2009) pointed out a similar issue; of overlaying new educational systems with older ones within the schooling sector. "Vigorous leadership from top management, and a revolution in corporate culture" are required (Kodama, 2000, p. 192). Wenger and Snyder refer to the need for different support and accountabilities as a managerial paradox (2000).

Fullan (2006) claims that clustering or networking is an effective form of accountability by design. He sees these networks employing sophisticated strategies with an emphasis on "capacity building with a focus on results" (p. 42), rather than the "prevailing strategies [that] rely largely on outmoded theories of control and standardisation of work" (Berwick (2003, p. 448) in Fullan (2003)). Based on his review of seven international case studies, Annan (2007) also pointed out that typical traditional 'machine bureaucracies' emphasised close supervision 'vertically'. Those which developed 'horizontal learning connections' (in communities of practice within the New Zealand reform programmes reviewed) used "a nonhierarchical mechanism for developing knowledge locally with practitioners." (p. 163), and were "a form of formative supervision to make sure ... practices ... [are] adopted and used" (p. 164). He says that CoPs "nurtured collegial learning and accountability among practitioners...[and that members]...held each other to account without a power relationship giving one group the upper hand" (p. 165). Pettigrew and Fenton (2000) see leadership in a learning organisation as "a reciprocal process of tight feedback loops, in which leaders and other organizational members jointly

develop the direction of the organization" (p. 55) based on continuous dialogue. Annan also reported that:

Distributed power and control did not engender loose arrangements. To the contrary, the communities of practice were highly disciplined arrangements that led to standardised ways of doing things. The end-point was identical to the vertical learning environment but the way that the horizontal learners got there was far more self-determined (2007, p. 167).

Even more relevant to this study, Annan recognises that this emphasis on 'horizontal learning connections' (e.g. a designed CoP) is "an intrinsic change principle which fits comfortably with New Zealand's policy commitment to the long game" (p. 165), i.e. sustainable change within an autonomous system. Annan emphasises that his study clarified "explicit...[and]...powerful design mechanisms for developing effective schooling improvement interventions" (p. 169).

2.4.3 Cluster governance options

A variety of new models of governance, as applied to education, have arisen in the last decade. Bush (2008) notes Hartley and Hinksman's (2003) review of the literature when he reiterates that "leadership development requires a focus on structure and systems as well as people and social relations" (p. 109). It is pointed out by the Innovation Unit and Demos (2007) that "we need next practice models of governance as much as we need next practice models of leadership" (p. 6), that "new forms of governance are the inevitable other side of the system leadership coin" (p. 6). Hargreaves (2003) pointed out that "federations or collegiates" of groups of schools hold promise for transforming the system (p. 40), because they can discipline the transfer of innovation, through peer sharing (p. 49), as reviewed above. A consideration of the development of cluster and federation structures follows, with some examples from England and Australia, and with reference to New Zealand's e-learning clusters.

The Technology Colleges Trust (2000) conference summary paper One World One School reported the call from many to abandon the conception of 'schools as islands', even that "it is not sufficient to tinker with existing structures" (p. 1). Federations are considered to be an effective new structure (for autonomous schools) to support and/or lead school reform (Caldwell, 2006a; Zuboff & Maxmin, 2004). Collarbone and West-Burnham (2008, p. 66) quote Handy (1989) regarding features of federalism.

Federalism implies a variety of individual groups allied together under a common flag with some shared identity. Federalism seeks to make it big by keeping it small, or at least independent, by combining autonomy with cooperation (p. 93).

There is a fascinating variety of cluster or federation models currently in use (Caldwell, 2006a; Collarbone & West-Burnham, 2008; Hargreaves, 2003). With the link between leadership and federations to collaborative transformation firmly established, a closer look at the structural options for organisational collaboration is required, based on the vast amount of material available from the English government's education websites.

2.4.3.1 Federations in England

Peel (2008) has listed a range of legal structures schools that may be used for clusters or federations in England. They include: Collaboration/Soft Federation; Hard Federation; Company Limited by Guarantee; and Trusts. Each type has different options for partnering, with varying degrees of commitment and shared governance. In a recent report addressing the trend toward and effectiveness of federations, PricewaterhouseCoopers LLP (2007) say that "collaboration and networking with other schools and other agencies ought to become the rule for schools, not the exception" (p. 4) in England. The requirement to collaborate effectively has "driven some schools to restructure in such a way to formally recognise the importance of inter-agency collaboration" (p. 7). For typical federation continua (scales of degrees of federation) and summary information, see Harvey (2004),

Innovation DfES (2008), PricewaterhouseCoopers LLP (2007, p. 10) and Figure 4 below.

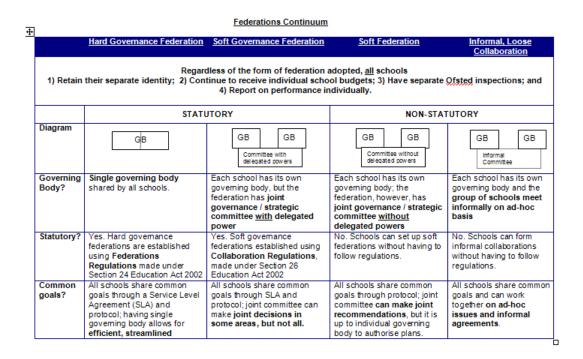


Figure 4 Federations continuum (Standards DfES site, 2008)

Here connectivity and cohesiveness align, with leadership that may stretch over very different school types and school contexts (Harris, 2005a, p. 11). Harris relates these structural changes to leadership:

For this to work effectively, it is clear that leadership will need to be located in the organisational spaces (i.e. within schools, between schools and in the larger spaces across the networks). ... these new ways of relating and working will require leadership that bridges organisational boundaries and links different structures together. It also presses us to examine current leadership practice in schools, and to judge how far current leadership practice is poised to meet the new demands of more distributed forms of leadership (p. 11).

These new structures are well researched, reported and adapted as trials and experience produce new knowledge about what actually works in collaborative contexts (Arnold, 2006; Carter & Sharpe, 2006; National College for School Leadership (NCSL), 2007).

Collarbone and West-Burnham recognise that the change for leaders is "very challenging" (2008, pp. 67-68). Demos also recognised that where leadership begins to function beyond the boundaries of a single school new questions arise regarding legitimacy and accountability, and how the authority of system leaders interfaces with the institutional autonomy of other schools (2007). However, Collarbone and West-Burnham (2008) point out that "It would be a naïve category mistake to see system leadership as ... a new 'level' of leadership" (p. 15); system leadership does not conform to hierarchical models. Demos (2007) has pointed out four kinds of change required, including: "develop a new generation of collaborative 'system leaders' who can broker and manage joint working" (p. 20) across a variety of organisations. The next section provides an overview of some federation practices and options.

Caldwell and Harris (2008) provide a list from Glatter (2003x) of four models of governance at a philosophic level, to which they have added a fifth, the 'learning organisation' (LO, or learning system, LS). They state that within the transformation agenda the learning system's "indicative policy" is "reform by small steps" (2008, p. 18), where the participants learn and adapt together, rather than implementation of a packaged programme (for a potential or proposed quantum step change). The learning system model makes the jump to collaboration across the system recognising that learning together is the focus of the new partnerships, the key strategy, as the synergies of collaboration are essential for success (Caldwell, 2006b, p. 85). He provides extensive examples of 'best' practice from various countries (p. 85-92).

2.4.3.2 Some international examples of federations

A particular English example, (with some contextual similarities to the rural NZ e-Learning clusters) reported in Caldwell (2006a), is the Rural Academy

of Cumbria with nine small rural secondary schools (a horizontal cluster). It has an organising body called the Rural Academy Research and Development (RARD) made up of deputy heads and professional development officers, as well as the Head Teacher Steering Group/Executive Board (p. 97). More detail on their collaborative project is reported by Caldwell, but one interesting example of deep collaboration, transparency and accountability is the practice of a "RARD self-evaluation group of heads visit[ing] each other's schools to monitor developments" annually (p. 98). An example of systemic governance in Cumbria is the twice-yearly meetings of the Governor's Forum, comprised of one governor from each school (p. 97).

Closer to home, the Lanyon Cluster is a long-standing and well-developed cluster in the Australian Capital Territory (ACT), which has been together since 1997 and comprises three types of schools (secondary, primary and outdoor). Again, Caldwell has detailed many of the significant collaborative and innovative features of this 'vertical' cluster's strategies, all forged in their annual two-day planning conferences and regular meetings of all staff (2006a, pp. 98-99). As well as the commitment to collaboration at all levels, one other implementation of system leadership is noteworthy. The cluster appointed a "cluster deputy principal" (p. 99) with deputy principal status within each school (with six appropriate name badges!), with their role focussed on capacity building across the cluster, not authority or control (p. 99). These measures demonstrate the significance and status that the cluster's collaborative strategy has in the participating schools (p. 98).

Both of these examples above might best be described as soft-federations, where the schools have separate governance boards but share in the governance of the cluster via a board of principals (p. 97, 98), share some funds, and employ cluster staff to drive and facilitate the agreed development strategies. So too, we shall see, are most of New Zealand's Virtual Learning Network (VLN) clusters.

2.4.4 Federations of schools in New Zealand

New Zealand's Ministry of Education (MoE) has used cluster-based collaborative projects as a means to improve or transform schooling since at least 1999 (Ministry of Education, 2006; Powell & Patrick, 2006), most of which were focussed around development of e-learning. There have been a range of three-year initiatives and contracts for self-selected school clusters, included Extending Higher Standards Across Schools (EHSAS), Information and Communication Technologies Professional Development (ICTPD), Collaborative Innovations contracts, and the videoconferencing clusters (up to 16) associated with the national Virtual Learning Network (VLN) (Pullar, 2002; Roberts, 2009). Strategies and support varied considerably, but one consistent aspect was the self-defined nature of each clusters' initiatives, a feature consistent with NZ's autonomous system, driven by local leaders within a collaborative paradigm. Most clusters were temporary, or became informal, after the initial contracts ceased, but most of the VC clusters have matured (Pratt et al., 2011).

Of significance to the context of this research are New Zealand's e-Learning clusters, which work together nationally as the Virtual Learning Network (VLN, n.d.). Most of the 12-18 clusters remain fully functional, some since 2002, although a few have amalgamated into super-clusters, and all are now self-funded. Typically these were self-selected groups of smaller rural secondary or area (all-age) schools, with about six to twelve schools in each cluster. A more recent development are city-wide clusters in some of our main cities (e.g. DunedinNet). Originally, the schools banded together to share a range of school development or reform goals and projects, especially using ICT to connect staff and students and to deliver professional development programmes, but many are now focussed on shared secondary teachers/classes via high speed videoconferencing and Moodle (Barbour, 2011; Powell & Barbour, 2011b; Pullar & C, 2008). On a national scale, the clusters' leaders (eLearning Principals; e-Principals) also collaborate in order to manage and lead the national videoconferencing eschool, where student enrolments (about 1500 in 2012) are not just shared cross-cluster but also inter-cluster (Bolton, 2008). National leadership is now supported by a Trust and Council with senior system leaders (principals

and ex-principals) supporting the e-Principals' leadership (Roberts, 2008) and the VLN's future development and funding, in association with the MoE. There is a well-established collaborative culture (vertical and horizontal) around leadership and programme development. School boundaries are blurring, a national identity is forming, and conceptions of management and leadership are being challenged (Collarbone & West-Burnham, 2008).

Two related developments are worth noting. Firstly, there was a two-year VLN-wide Leadership Development project (Roberts, 2008), designed to support and challenge the development of the teacher-leaders (the ePrincipals), recognising the need for leadership development for distributed and system leadership to be successful. Secondly, the development of the national Trust Council (VLN-C; VLN Community) to focus and oversee the development of the e-learning clusters seems relevant. The Trust might best be described as a national collaboration of soft federations. Clusters and individuals (Barbour & Wenmoth, 2013), and perhaps the MoE, continue to consider alternative structural arrangements, regionally and nationally, as they explore ways to raise standards, spread innovation and build sustainability.

More than a decade of cluster-based change, experimentation and a variety of research has developed some appreciation of the challenges associated with this paradigmatic movement away from a simply autonomous system, and of the potential for significant change in the classroom. The VLN leaders, including some cluster Lead Principals and their ePrincipals, have influenced thinking and practice in New Zealand through education publications, conference presentations and involvement in research (Bolton, 2008; Centre for Educational Leadership and Administration, 2012; Roberts, 2008). At least one cluster now has 'knowledge dissemination' as a specific goal (OtagoNet, 2012). It remains to be seen whether they achieve their goal of making a major contribution to system wide reform.

Part Four

2.5 Key requirements for effective cluster leadership and collaboration

The aim of this search of the literature was to identify some essential aspects of leadership and collaboration (including collaborative leadership) that research has indicated can make sustainable transformation a reality in secondary school clusters. The following appear to be aspects of collaboration that are supported by the literature, so are worth further investigation. They formed the basis of the design of some of the interview questions which were put to the five cluster Lead Principals and of the data analysis that followed.

Components of a model for effective collaborative leadership:

- 1 Principals' leadership paradigm change, to leaders of learning
- Collaborative systems federation structures and collaborative skills
- 3 Relational trust vs hierarchical control , for meaning and creativity
- 4 Learning leadership & capacity-building 'leaderful' and 'lov'n them'
- 5 Shared vision & ownership for commitment and sustainability
- 6 Dialogue group learning for innovative solutions
- 7 Teacher leadership in teams powerful learning and accountability
- 8 System leadership sophisticated developmental support across schools
- 9 Social impact transformation for the school and its community
- Moral leadership moral values drive the leaders and energise their teams
- 11 Collaborative culture and accountability transparency and peer review

These are summarised in the following paragraphs.

2.5.1 Principals' leadership

While the role of the school principal is still central (Berman & McLaughlin, 1977), the literature reviewed suggests that the role of principals must change. A new focus on leading learning (Hargreaves & Fink, 2006),

building leadership capacity (Fullan, 2007) and developing the not too loose/not too tight balance of pressure and support (Fullan, 2006) for sustainable transformative impact. Formal leaders create the conditions for distributed leadership; for the success of others. Leaders will need to eschew top-down hierarchical control systems, recognising the different requirements on their role as a paradigm shift (Eisner, 2004a); a new set of practices for leading where collaboration is the paradigm. (Sterling, 2009) encourages an 'ecological view' which emphasises relationships, where leadership is not formal, rather it is an outcome of 'relational work'. This is equally valid in cluster contexts, where Fullan calls it 'lateral capacitybuilding' (2006), an essential part of a school reform strategy. Elmore described the need for a change toward interdependence, to be modelled by principals as system-leaders and by teacher-leaders (Elmore, 2006). Creighton (2005) puts it this way: "In collaboration the message is clear: No single school leader can assume the responsibility for creating the conditions that will have the greatest impact on organisational effectiveness and student learning" (p. 46).

2.5.2 Collaborative systems

The new systemic organisational models, beyond the autonomous school, are important to support collaboration (Fullan, 2007). There is a range of federal models that have been used to structure effective school improvement programmes (PricewaterhouseCoopers LLP, 2007), most of which may be used in New Zealand's education system. Writers agree that where partnerships between schools are 'soft-federations' "situational power will rarely be an option" (Collarbone & West-Burnham, 2008). These cannot be led using the prevailing strategies that "rely largely on outmoded theories of control and standardisation" (Bate et al., 2005, p. 448). Collaborative projects require collaboration at every level: systemic, crosscluster and within schools and their departments (Fullan, 2007). Other models of collaborative practice include Learning Organisations and Communities of Practice (Senge, Cambron-McCabe, Lucas, Smith, & Dutton, 2012). Collaborative leaders develop collaborative strategies to build 'leaderful' organisations, where team-based leadership builds capacity for sustainability.

2.5.3 Relational trust

Writers agree that trust is fundamental to effective collaboration and must be fostered at every level of management (Harvey, 2004). (Fullan, 2008a) says that the first leadership 'secret', to "love employees" (p. 21), is explained as "creating the conditions for them to succeed" (p. 25). For system leadership, Collarbone and West-Burnham (2008) emphasise that relational trust "is the only model that is appropriate to this context" (p. 91). Sergiovanni (2005) pointed out that "trust works to liberate people to be their best, to give others their best, and to take risks" (p. 90). Creativity is an important outcome of trust; generating commitment and creativity is the power of the collaborative model.

2.5.4 Learning leadership and capacity building

The emphasis in the literature is toward the development of a collaborative learning culture (Fullan, 2008a), away from episodic individualistic professional development. According to Fullan, a "network or cluster-based strategy can do double duty ... pay[ing] enormous dividends" (2007, p. 56). Fullan calls this "learning is the work" (2008a, p. 77), where the teachers together makes a "science of performance" (Gawande, 2007, p. 56), and consistency and innovation go hand in hand (Liker & Meier, 2007).

2.5.5 Shared vision and ownership

Fullan (2008a) called his second 'secret' "Connecting peers with purpose", yet sees that a "shared vision or ownership ... is more of an *outcome* of a quality change process than it is a *precondition* of success" (p. 41ff, italics in the original), and certainly not an imposed 'vision'. This because tacit knowledge is constantly converted into shared knowledge in collaborative cultures (1995). Lambert's view of learning leadership is to support the learning of the community of teachers to enable them to develop their (independent and collective) shared vision, their teaching paradigm, and their initiative (Lambert, 1998). This focus on employees helps them "mak[e] contributions that *simultaneously* fulfil their own goals and the goals of the organisation…" (italics in the original, Fullan (2008a, p. 25)). It is clear

that a truly shared vision an absolute necessity for success and sustainability.

2.5.6 Dialogue

Dialogue is a distinct type of communication, very different from conversation and discussion (Senge, 1990), often requiring facilitation to be effective. It is a complex social process "involving reconciling perceptions, building consensus and securing agreement" of a group to shared action (Collarbone & West-Burnham, 2008, p. 89). They also emphasise the values and attitudes embodied in dialogue, suggesting that it changes "the way the thought process occurs collectively" (Bohm, 1996, p. 7). Facilitating dialogue skilfully is a fundamental requirement of system leaders, in any collaborative context (Collarbone & West-Burnham, 2008). The tension of diversity, of group members, combined with dialogue can generate truly innovative educational solutions (Fullan, 2008a).

2.5.7 Teacher leadership in teams

Fullan (2006) says that the key test of any theory is that it is "motivational, mobilising a large number of people to put in their energy?" (italics in the original, p. 80). Large numbers of leaders are required, "within and across the three levels" in his tri-model, to own any transformation strategy (p. 80). Principals need to move away from the 'leader-follower' model to develop new professional relationships based on collaboration and mutual agency (Harris, 2012). Distributed leadership strategies are now widely accepted as crucial for sustainable transformation. Fullan (2003) makes leadership capacity building a priority: "Indeed, fostering leadership at many levels is one of the principal's main roles" (p. 24) to support the now common emphasis on distributed leadership. Collaborative strategies require cultures, teams and networks of peers for shared leadership to develop (Hargreaves & Fink, 2006), as well as principals who forego any right they might have to lead with authority.

2.5.8 System leadership

System leaders share a concern and commitment to working collaboratively with others outside their own school (Hopkins, 2006). Most commonly they are principals who have developed collaborative systems within their own schools, but they may be other senior leaders, or new leaders, as well (Collarbone & West-Burnham, 2008). Innovation Unit NCSL & DEMOS (2007) paper emphasises "the concept of system leadership is a move towards a more deliberately collaborative and interdependent system ...[and] is also a move away from headship or institutional leadership" (p. 3). It is inherently non-hierarchical; some cluster chief executives call themselves 'chief facilitator' (Chapman et al., 2010), treading a delicate path as they work with other leaders. System leaders, tend to emphasise teamwork, distributed models of leadership, and building that capacity across a federation and the whole system.

2.5.9 Social impact

Grace states that the any leadership preparation model should seek to develop critical, reflective school leaders who have the capacity to critique government policy as well as leading an education system which builds citizenship (1990). This critical perspective, where educational leader's values cause them to act on the system as well as within it, is based on social justice values and aspirations (Bottery et al., 2012; Fullan, 2006; Thrupp & Willmott, 2003). As Foster puts it, leadership:

Is and must be socially critical, it does not reside in an individual but in the relationship between individuals, and it is oriented towards social vision and change, not simply, or only organizational goals (1989, p. 46).

2.5.10 Moral leadership

Leadership that transforms is driven by a set of educational and moral values (Bottery et al., 2012) rather than any prescribed set of competencies or government mandates. Fullan and Ballew (2001) claim moral purpose is critical to long-term success; it is the quality at the centre of any leadership model (Porritt, 2010). Moral leadership is based on developing trust-based relationships with shared values which engender moral action and

leadership in others, in order to achieve the desired improvement in student learning outcomes (Bryk & Schneider, 2002). Moral leaders are committed to a form of collaborative learning whereby the institution or system is facilitated to form, or function as, a real learning community (Bottery et al., 2012), where the inherent accountability enables disciplined innovation and sustainable transformation.

2.5.11 Collaborative culture and accountability

As Briggs (2010) has pointed out, "collaborative leadership has joint responsibility and joint accountability for a wide range of partnership outcomes" (p. 236). We are assured that group transparency produces strong accountability pressures (Fullan, 2007), because "collaborative cultures lend support but also contain powerful peer pressure" and take "all excuses off the table" (p. 61). It is clear that collaboration, for those who choose it, modifies notions of autonomy, adding in a new layer of accountability; 'not too tight' but 'not too loose' as Fullan (2006) put it. Accountability to one's peers, especially collaborating leaders, leads to capacity-building for leaders as well as teachers resulting in improved and more sustainable outcomes.

Paolo Freire once said:

"No one educates anyone else

Nor do we educate ourselves

We educate one another in communion, in the context of living in this world"

(Freire, 2007)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The search for meaning and 'truth' is age-old, an aspect of peoples' drive to improve their position and experience of life. Research is one of Mouly's (1978) three categories whereby people have sought to learn and understand their environment: experience and reasoning are the other two. Research seeks a disciplined approach; as Kerlinger (1970) defines it: "the systematic, controlled, empirical and critical investigation of hypothetical propositions about presumed relations among natural phenomena" (cited in Cohen, Manion and Morrison, (2003, p. 5). Disciplined inquiry is expected to lead to greater understanding, better integration of facets of knowledge and wisdom – and perhaps, in this case, applications to other innovative educational clusters.

Following the review of the literature, the key question for this research was:

What are the most appropriate and contextually effective models for leading and managing collaborative relationships and shared long-term projects for clusters of secondary schools?

The sub-questions were:

- 1 How do New Zealand's e-learning cluster collaborations operate in comparison to the range of possibilities as promoted and used internationally?
- 2 How do the collaborative processes and leadership used by the Virtual Learning Network e-learning clusters compare to those purported by the literature to be systemically 'transformative'?
- 3 What can cluster leaders do to strengthen collaboration and increase the impact on teacher practices and student learning outcomes? How can leaders make transformation continuous

and sustainable? How might the VLN continue to impact positively on the system as a whole?

It was intended that a better understanding of both management structures and leadership practices in established e-learning clusters may assist other cluster leaders and policy-makers in their design and support for innovative collaborative leadership strategies and systems that support increased student learning, as well as help develop personal knowledge and practice.

The following sections address the research paradigms available; the chosen approach and tools selected for this investigation; issues around research practice, finishing with detail of how the data was actually collected and analysed.

3.1.1 Research paradigms

Learning from research is not experienced within a vacuum; not on a 'blank canvas' of the mind. Rather, it is designed and enacted by the researcher (consciously or unconsciously) within an interpretive framework and set of beliefs about reality; typically called a 'paradigm' (Somekh & Lewin, 2005). Research paradigms are based on ontological beliefs, the nature of social phenomena; epistemological beliefs, the nature of knowledge; and methodological beliefs, that is, assumptions regarding "the social world, how science should be conducted, and what constitutes 'proof'" (Creswell, 1994, p. 1f), including how social science research should be conducted. One's worldview, or adopted paradigm for research purposes, will determine the approach to research that one adopts, and perhaps also the research's outcomes.

There are three broad paradigms recognised by academics which a researcher must recognise and address: positivist scientific, interpretive naturalist, and post-structuralist/critical. They each have their own ontological, epistemological and methodological assumptions, but as Guba and Lincoln (1994) have stated, in all cases these are "human constructions" (p. 108); there is no pre-eminent paradigm to generate 'truth'. Since proof of truth may be impossible, the researcher will therefore rely on

persuasive and erudite reasoning, after determining which paradigm best fits the research context and aims. The researcher's assumptions and paradigm impact directly on the proposed research methodology, and helps inform the choice of research methods.

3.2 Research approaches

The various perspectives demand quite different research approaches and methods towards the discovery of new knowledge and understanding. The approaches addressed below comprise: quantitative, qualitative and critical, together with a consideration of social constructionism. The selected approach for this investigation is detailed at the end of this section.

3.2.1 Qualitative and Quantitative

A quantitative research methodology is the usual choice for researchers with a positivist scientific perspective, where the key tenets are: objectivity, independence of the researcher, value-free and unbiased, a language with set definitions, deductive, predictability, context free, the construction of laws and rules of behaviour, and the search for cause and effect (Creswell, 1994, p. 5). This is based on the assumption that reality and truth exist outside human perception, and that these can be known, measured and quantified - and made into generalizable, useful laws (Collins, 2010). Methods common to this paradigm include surveys and experiments from which measurable data are mathematically or statistically analysed with conclusions drawn deductively. However, Habermas (1972) has challenged the dominant view that "all knowledge becomes equated with scientific knowledge. It reduces behaviour to technicism" (in Cohen et al., 2003, p. 19). Naturalistic writers criticise positivism as misrepresenting human nature, that; it is dehumanising in its emphasis on measurement and statistical analysis; it has put limitations on increasing our self-awareness; and "it makes for a society without conscience" (p. 19).

Those who choose a qualitative research method avoid a positivist view (anti-positivists or post-positivists), believing that; "the supposed objectivity of science is a delusion" (Burns, 2000, p. 10); more importantly, that it is

more honest and useful to assume that the "individual's behaviour can only be understood by the researcher sharing their frame of reference" (Cohen et al., 2003, p. 20). They believe that knowledge is always context—bound, also acknowledging that this limits the generalizability of any learning, especially in social science contexts. Beck (1979) points out that social science offers: explanation, clarification and demystification of the social forms which people have created around themselves. While recognising the challenge of working within a "complex historical field" (2005, p. 2), Denzin and Lincoln's definition of qualitative research is: "a situated activity that locates the observer in ... their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (p. 3). This hermeneutic phenomenology:

tries to be attentive to both terms of its methodology: it is a descriptive (phenomenological) methodology because it wants to be attentive to how things appear, it wants to let things speak for themselves; it is an interpretive (hermeneutic) methodology because it claims that there are no such things as uninterpreted phenomena (Helen, 2003, p. 90).

The qualitative research paradigm is based on the ontological view that social reality is internal to individuals (within one's own mind), and the epistemological view that knowledge is merely subjective and essentially personal in nature (Burrell & Morgan, 1979). Anti-positivists allow for multiple constructions of reality, based on social constructionist philosophy and Kant's model of human rationality; consequently they call for "disciplined subjectivity" (Mohr, 2001) on the part of the autonomous researcher. Qualitative researchers favour conversation to describe "multifaceted images of human behaviour as varied as the situations and contexts supporting them" (Cohen, Manion, & Morrison, 2000, p. 23), which often results in the use of interviews or focus groups to elicit data.

3.2.2 Critical Inquiry and Social Constructionism

Critical theorists challenge the status quo (Grogan & Simmons, 2012). Based on postmodern/poststructural theory (Weedon, 1997), they argue for a deeper analysis, seeking to uncover the interests at work, and to

interrogate the legitimacy of those interests (for all stakeholders). According to Habermas, the critical paradigm "... subsumes the previous two paradigms; it requires them but goes beyond them (Habermas, 1972, p. 211)" in Cohen et al. (2003, p. 29). Further, "its intention is transformative: to transform society and individuals to social democracy" (2003, p. 28), and "it is concerned with praxis – action that is informed by reflection with the aim to emancipate (Kincheloe, 1991, p. 177)" (2003, p. 29).

This goal of critical inquiry – the growth of freedom – appears laudable, but it leads to the fundamental critique of critical inquiry itself. With a deliberate political agenda the critical methodology is said to be at odds with the normal 'scientific' research principle: the requirement for a dispassionate, disinterested and objective researcher (Grogan & Simmons, 2012). This principle (that ideologically and value neutral research is possible) is also comprehensively challenged by feminist researchers who go even deeper into an emancipatory agenda, addressing "the 'power issue' in research ... and... questioning the legitimacy of research that does not emancipate hitherto disempowered groups" (Cohen et al., 2003, p. 35). While power or status differentials were not the prime focus of this investigation, Grogan and Cleaver Simmons' recognition of the label "transformative" (2012, p. 30), to cover all the critical variants, seems to be consistent with the overall developmental intent of the VLN clusters and their leadership.

There is a need to consider more closely the underlying social constructionist paradigm on which poststructural theory and the qualitative methodologies are based. Lock and Strong (2010, p. 12) locate the origins of constructionism as far back as Vico's *Scienza Nuova* (1725) where he challenged the belief that rational methods produced certainty and asserted that all knowledge is history-bound. The social behaviourist Meads further linked the development of the mind "as an inherently social phenomenon that arises from acts of communication" (in Lock and Strong (2010, p. 122). Vygotsky asserted that human development is socially constructed, higher mental functioning in the individual arises out of social processes, according to Wertsch (1985); that human social and psychological processes are shaped by one's culture. More recently, Wittgenstein's emphasis on making meaning via talking; "language games", and his belief that "words are

deeds", along with "a relational view of meaning" (Lock & Strong, 2010, p. 157), is considered a "cosmological shift" (p. 168). Lock and Strong also point to Garfinkel who developed the idea of reflexivity based on active involvement in life experiences, while Foucault emphasised the idea of socially constructed discourse which led to the conclusion that "truth, in human affairs, is historically and culturally situated... not abstractly transcendental" (p. 247). They suggest that Shotter sums this up with his "responsive, conversational understanding" of knowledge development (p. 338), based on each person's cultural backdrop, which significantly is often not noticed. This development of ideas has "seriously implicated ... the role of the researcher and research as reflexive and constructive" (Morrison (2012, p. 210), italics in original), where the researcher's role includes 'participant' and 'interpreter', distinctively acknowledging the "centrality of the researcher" (p. 210, italics in the original). Dimmock and Lam (2012) also note that this leads theorists such as Charmaz to advocate for the more interpretive role where both parties in an interview may co-construct theory and new knowledge. The constructionist paradigm places a significant burden on the social science researcher's approach design, data generation and analysis, requiring a deeply reflexive interpretive approach to ensure validity and reliability of the investigation's conclusions.

3.2.3 The approach for this investigation

Perhaps the first design question is the choice of paradigm and its general approach. This investigation of models for managing and leading collaborative relationships within secondary school clusters as seen by the clusters' Lead Principals is most closely aligned to the naturalist, interpretive approach. The reason for adopting this research paradigm is that the interviewer/researcher acknowledges the uniquely personal, subjective and contextual nature of knowledge that is collected via interaction with others, in particular through structured professional conversations (Kvale & Brinkman, 2009; Silverman, 2010). According to social constructivists, there is an "interdependence of human interaction and knowledge production" (Kvale & Brinkman, 2009, p. 2), and knowledge may be constructed through conversation including that of an interviewer and

interviewee. It is my opinion that the qualitative paradigm is the most appropriate approach to this research, with a primary focus on interviews to elicit the perceptions and practices of the cluster Lead Principals, of which more detail follows.

3.3 Research design

The issues associated with research methods, including: the selection of research tools; the detail of how the tools should be, and were, used; ethical practice; and considerations around securing accurate data, will be dealt with next.

3.3.1 Research tools

As the second design decision – which methods are to be used to collect and analyse data – it was crucial to ensure that they were consistent with the chosen methodology. Essentially, all methods can be reduced to a basic inquiry process: "all interpretive inquirers watch, listen, ask, record, and examine" (Schwandt, 1994, p. 119). Importantly, they should each be chosen to elicit the desired depth of information required to meet the expectations of the research. According to Brewer (2006), qualitative research is inherently multi-method; a view that is primarily based on the need for triangulation. So a mixed-method design was chosen where data is acquired by several different means. These included:

- Review of international literature: to ensure a thorough understanding of the general topic from an international perspective;
- Semi-structured interviews: useful in gathering data where the subject's experience and perspective is of primary importance (Morrison, 2012);
- Document analysis: primarily to assist with verification and reliability (Cohen & Manion, 1994).

The review of the international literature addressed the various conceptions of leadership for transformation and any connections to collaborative

systems; the semi-structured interviews of five cluster Lead Principals was the primary data collection method; with additional support from documentary analysis of definitive cluster Charters and other relevant documents, especially regarding their management and development strategies.

Several constraints impacted on the selection of methods, including factors such as personnel, time, distance and money. While the extent of leadership and management practices (especially regarding the practice of distributed leadership) might best be studied at multiple levels of staff in a variety of roles and responsibilities over a period of time, (to perhaps provide 'leader' and 'follower' perspectives), it was decided that this was beyond the parameters of this academic paper with strict length constraints. It was impractical for both the researcher and prospective interviewees to allocate extended time periods to observations, note-taking or journaling. As the Lead Principals were spread across New Zealand, distance was also a significant factor contributing to the choice of a limited number of interviews which could be conducted via videoconferencing, rather than a personal visit to each school or a more elaborate option such as a focus group The limited personal research budget also precluded any approach. significant travel.

3.4 Mixed-methods

The two key means of collecting qualitative data about leadership and management practices in eLearning clusters focussed on semi-structured interviews with cluster leaders (Lead Principals), supported by an analysis of their cluster's charter documents.

3.4.1 Semi-structured interviews

Interview types are usually divided into three categories: structured interviews, semi-structured interviews, and unstructured interviews (Fontana & Frey, 2005), with semi-structured interviews a common choice for small scale research such as this. This method recognises that people are deliberate and creative, proactively construct their world, are richly affected by context, act on the basis of their interpretations of events, see

reality as complex and multi-layered, and that we require 'thick descriptions' (Geertz, 1973) which enable the researcher to see the reality of "situations in the eyes of the participant rather than the researcher" (Cohen et al., 2003, p. 22). The researcher's purposes for interviews were mirrored by those of Cohen et al. (2003, p. 268): (1) a principal means of gathering information; (2) to test hypotheses; (3) to "go deeper" into the thinking of interviewees in conjunction with another data gathering tool. Cannell and Kahn (1968, p. 527) see the purpose as "obtaining research-relevant information" which is focussed by the researcher "on content specified by research objectives of systematic description, prediction or explanation." Semi-structured interviews give participants (both interviewer and interviewee) a chance to discuss their interpretations of words, conceptions, practice, and the world as they see it; to assist the interviewee to focus; "more or less open-ended questions are brought to the interview situation in the form of an interview guide" (Flick, 1998, p. 94).

While interviews may appear simple they are not free of limitations. An interview has "its own issues and complexities, and demands its own type of rigour" (O'Leary, 2004, p. 162), causing many to see this as a craft (Kvale & Brinkman, 2009) and to recommend development of interviewing skills (Hoyle, Harris, & Judd, 2002; Kvale & Brinkman, 2009). Although a researcher is more likely to elicit a response through interviews than through questionnaires sent by mail, some interviewees may feel intimidated or threatened by the interviewer or context, especially if they are concerned about their anonymity or safety. As foreshadowed earlier, any lack of trust could seriously impact on the truthfulness or depth of the responses. Also, the social dynamic of the interview needs to be examined, particularly in regard to gender, race, and status or power differences (Fontana & Frey, 2005). It has been claimed that the "in-depth face-to-face interview has become the paradigmatic 'feminist method'" (Kelly, Granich, & Secrett, 1994, p. 34). Feminist researchers (Delamont, 1992; Oakley, 1981) argue that interviews tending towards the open-ended end of the scale more easily facilitate the establishment of rapport and therefore have the potential to democratize the research relationship. Establishing rapport was a key

strategy, which was easily achieved due to the prior (though limited) working relationships and prior mutual respect.

3.4.2 Document analysis

The second important method of collecting data in this study was the analysis of the documentation that a cluster had to define itself – primarily its governance documents. This included: funding proposals, memoranda of understanding, cluster (or school) charters and policies that pertain to governance, leadership and relations between different staff and leaders within the cluster. These were primary sources (Hill & Kerber, 1967) written by cluster leaders or their staff, but may still need to be assessed against four criteria as defined by Scott (1990), with perhaps representativeness and meaning being the most relevant criteria in this context. Textual analysis was the focus (rather than the more quantitative content analysis), towards identification of the underlying themes and theoretical interpretation (Fitzgerald, 2012). While the documents were an important source of data and verification, they didn't play as important a role as the interviews did, because the interpretation, experience and practice of the Lead Principals were much closer to reality.

The ease with which documents may be analysed (at the researcher's convenience, without input of extra time by the participants), and the fact that they represent data which are "thoughtful in that informants have given [prior] attention to compiling" (Creswell, 1994, p. 151), which Reinharz (1992) called naturalistic being not produced for the purposes of research, are two key factors in choosing a document analysis.

Their inclusion in the research was to help the researcher to examine the consistency between espoused-theory and a respondent's theory-in-action (Argyris & Schön, 1978). Creswell recommends drafting a protocol for recording essential information (as for the interviews), including: "(a) information about the document or material and (b) key categories that the researcher is looking for in the source" (Creswell, 1994, p. 152).

3.4.3 The participants and sampling

Access to the field and research participants, is another aspect of research design, which in this case was a simple and agreeable process. A purposive selection of five Lead Principals (out of the total population of up to 16 secondary VLN cluster Lead Principals nationally) were approached directly; the key selection criterion was length of service as a cluster Lead Principal. All agreed immediately to be research participants. Their actual lengths of service as VLN cluster Lead Principals ranged from four to seven years, being the most longest-serving leaders available, with the exception of the researcher's own Lead Principal who was excluded for ethical reasons. These Lead Principals were typically Chairperson of their cluster's top policy or management committee/trust/board which was commonly made up of all of the cluster's principals. Most of the clusters investigated had a focus on shared videoconference-based virtual learning along with other shared educational projects, however one Lead Principal's cluster had a primary emphasis on shared development of eLearning in the classroom with a much lower emphasis on videoconferencing (VC). All were very experienced secondary school principals; all have now moved on to other ventures although some have retained an association with the Virtual Learning Network and/or their original cluster. All were keen to share and extend the culture of development, innovation and transformation via elearning that they had overseen. While a random sampling of all possible Lead Principals was an option, which may have garnered a wider range of responses, it was felt that the experience and success of the most experienced leaders nationally would be useful in providing valuable data and research outcomes that others may find useful.

The small sample size of five, approximately 50% of the population, was chosen to keep the project manageable. The small sample size enabled deeper analysis; however it also limited the potential for comparison and generalisation of any data outcomes. This is consistent with the situated, locally constructed nature of the knowledge being investigated; the limitations of the research expectations; and recognises that any possible applicability of the research outcomes will be dependent on a reader's own context and paradigms.

3.4.4 Ethical issues

A key issue at the basis of every research project is the conflict between the rights of the individual to privacy and the public's right to know (Evans & Jakupec, 1996). Respect for all other persons is a foundational principle in educational research – based on the Kantian moral principle that "people should never be used merely as a means to someone else's end" (Guillemin & Gillam, 2004, p. 271) – where researcher and interviewees work together for a common purpose, as well as being critical to securing accurate data (Busher & James, 2012). It is not ethically permissible to violate participants' self-purpose, rather to recognise their decision making rights and "adequately respect the autonomy of the individual" (Guillemin & Gillam, 2004, p. 271). This demands that persons enter into research voluntarily and with adequate information, even perhaps "tak[ing] up the goals of research as their own" (p. 271), becoming participants rather than merely subjects. Beneficence is a second factor, which describes an intention to make efforts to secure the well-being of participants, a very positive stance. A third principle is justice, where the concept is the fairness of the distribution of benefits and burdens of the contemplated research across all parties. The context for this study means that it has a positive purpose, with the participants agreeable to sharing their success stories and all parties aiming to identify effective improvement principles and strategies, rather than focussing on the existence of problems.

Trust is the foundation of an ethical study (Bloor & Wood, 2006). To establish trust, informed consent is a primary requirement for all participants. The research agenda was disclosed to the prospective participants in written form). This described the procedure, the purposes, the risks and anticipated benefits, and offered the opportunity to ask questions at any time and the right to withdraw at any time (Kiegelmann, 1996), up until one week after the transcripts have been verified. To Kiegelmann et al. informed consent is an absolute, where the dignity of the participants outweighs any other considerations, such as the rights of the researcher, public or the profession. This researcher has undertaken to comply with all of the requirements of the University of Waikato's *Human*

Research Ethics Regulations 2005. All participants will be supplied with a copy or summary of the final report.

The other major factor is the guarantee of anonymity and/or confidentiality based on the right to privacy (Pring, 1984) and protection from harm, including potential harm to reputations. Care was taken to ensure all processes and responses were not only confidential but that all names and personal data that others may use to identify someone were removed, and pseudonyms were used where required in reports. All research tools, data and products are stored securely in locked files or premises, and will be destroyed once their usefulness for the thesis has ended. Complete confidentiality is assured for all participants and their organisations.

Ultimately the relationship of researcher to participant is critical, in building trust and rapport, securing deep exposure and understanding, and collaboration to ensure reliable understanding of the data and valid conclusions.

3.4.5 Validity, Reliability and Triangulation

The term validity refers to whether a study actually investigates what it is intended to investigate, and describes the phenomenon accurately (Bush, 2012). Conceptions of validity in data collection have developed from the simplistic idea that an instrument actually measures what it is purported to measure, to a vast array of types, but the main change has been to acknowledge that striving to minimise invalidity is a realistic goal, and is a matter of degree (Grolund, 1981).

Naturalistic research adheres to a number of principles as listed by Cohen et al. (2003, p. 106), including: the natural setting is the principal source of data; the concern is for processes rather than simply outcomes; and, respondent validation is important. Some suggest that the emphasis on 'understanding' in qualitative research is better than the use of the term 'validity' (Maxwell, 1992; Mishler, 1990). Respondent validation (Hammersley & Atkinson, 1995), is a key process in determining internal validity; also one of six actions Lincoln and Guba (1985, pp. 219, 301) provide for researchers to consider, as quoted in Cohen et al. (2003, p. 108).

Three other relevant processes used were from the list in Lincoln and Guba (1985): "triangulation", "peer debriefing" and "member checking" (p. 108). Not only were concepts and understandings clarified during the interviews, it was decided that each transcript of the raw data would be returned to the participant for checking purposes. Also, after at least the initial analysis, the categorised data was returned to each participant (where they were interested) for checking of the researcher's conclusions (Creswell, 1994, p. 158). The key goal was to "minimise the distance between the researcher and the informant" (Creswell, 1994, p. 158; Guba & Lincoln, 1988). These processes help establish the trustworthiness of the research, this being Lincoln and Guba's preferred criteria for quality (Bassey, 1999; Bush, 2012).

The concept of reliability addresses the consistency of the research findings. Judicious use of a range of question types, especially probing questions (to repeatedly check or go deeper) is recommended by Kvale and Brinkman (2009) in the belief that they enhance reliability if they can lead in important directions and "yield new and worthwhile knowledge" (Kvale, 1996, p. 286). Transcriber reliability and comparability is not believed to be an issue in this study, as there is only one transcriber, and transcripts were checked by respondents.

The issue of the generalisability of the results to a wider population or other contexts is termed "external validity" (Cohen et al., 2003, p. 109). Unlike quantitative research, qualitative methodologies suffer from a range of restrictions when it comes to the possibilities for generalising conclusions. A good number of writers are comfortable with interpreting this as 'comparability' and 'transferability' (perhaps depending in the 'translatability' of the context and conclusions) according to many writers, such as Cohen et al., (2003, p. 109); Lincoln & Guba, (1985); Eisenhart and Howe, (1992, p. 647); LeCompte and Preissle (1993). Naturalistic researchers are interested not in universal generalisability, rather the issue is the actual contexts and people to which the research conclusions might be generalisable. Feldman, Skoldberg, Brown, and Horner (2004) support the view that small scale qualitative studies such as this can only provide "partial" knowledge that is "situated, local, interested, material and historical" (p. 14).

3.5 Data gathering

The participants received the basic list of interview questions prior to the interview. These guided the sequence of questions for every interview, with the interviewer at times adding probing questions to elicit clearer understandings in order to generate shared meanings for each main question, with the participant being encouraged to speak from their own perspectives and frames of reference and with their own natural terminology. "The licence to generate new questions in order to explore the clarified topic is an important feature of contextualised research" (Annan, 2005, p. 38). It is the responsibility of the interviewer to reflect and probe in order to ensure that negotiated meanings are shared.

Open positive relationships were easily developed, as the researcher had a close affinity to the VLN cluster work and a prior working relationship (in varying limited degrees) with each of the interviewees, thereby conducive to open-ended questions, deeper probing and prompts (Morrison, 1993), all contributing to the quality of the data. The interviewer was mindful of LeCompte and Preissle's (1993, p. 177), list of important interviewer prompts and responses including: supporting, empathising, clarifying, crystallising, exemplifying, summarising, avoiding censure, and accepting (cited in Cohen et al. (2003, p. 146). Considering the social, interpersonal nature of the encounter; possible "unwritten scripts" (Kvale, 1996, p. 125); and potential status miss-matches, the researcher as research instrument was sensitive to and worked on establishing a supportive atmosphere and to communicate "active listening" (Cohen et al., 2003, p. 279).

Since the interviews were conducted via videoconference (VC) there could have been two possible impacts in this context. Firstly, there is the possibility of fewer non-verbal cues being transmitted via the technology as compared to a face to face interview (Straus, Miles and Levesque (2001, p. 366). The researcher/interviewer was careful to provide positive visual responses to support the process (Duncan, 1974). Focus and image size issues were addressed with each participant to ensure visual cues were clear and unambiguous. According to Straus et al. (2001, p. 366), "These

signals are important because they help coordinate conversations and facilitate listener understanding (Clark & Brennan, 1991; Kraut, Lewis, & Sweezy, 1982)". There is also a typical time delay in the VC context that may have a tendency to cut off some of the non-verbal cues, the "back channel responses" that contribute to the flow and meaning (Straus et al., p. 366). We found the VC context was conducive to open conversations that generated common understandings, probably because all participants were comfortable, having been being pioneers in the field. The recognised protocols for VC meetings were reviewed prior to the commencement of the interviews. The interviewer was mindful of advice like 'listen with your eyes' (from experts and popular song lyrics), and to check for visual clues (Usher, 1999).

The interviewer also took responsibility for the dynamics of the interview, having reviewed interview-craft prior: keeping the conversation going, motivating participants to discuss their thoughts and experiences; dealing with any asymmetries of power, as the progress of the interview is controlled by the interviewer; providing a range of feedback, from perhaps silence to clear direction, or even suggesting classifications of data, to assist with clarity and later analysis. The use of colloquial language or at least academic terms that are in common use in the interviewee's context (Patton, 1980, p. 225) also assisted with the flow of conversation. Cohen et al. (2003) have a list of potential obstacles to a smooth running interview and a list of "quality criteria" (from Kvale, 1996, p. 145). This researcher kept in mind two key aspects: firstly "the ideal interview is to a large extent interpreted throughout the interview [verifying understanding/interpretation] at each stage]"; secondly "the shorter the interviewer's questions, and the longer the interviewee's answers, the better" (p. 280-281) - as these recognise the emergent nature of qualitative research being based on "negotiated outcomes" (Creswell, 1994, p. 162; Lincoln & Guba, 1985).

While the semi-structured interview enables comprehensive and deep data collection, there are two potential areas of difficulty. One, the interviewer's flexibility may result in accidental omission of important questions, and two, the collected data are time-consuming to analyse due to the unstructured

nature of the collection format. A protocol (Creswell, 1994, p. 152) was drafted for the interview to guide the interview process and restrict side-tracking by the ideas proffered and the general discussion. Descriptive notes were also taken by the interviewer (p. 152), partly as a back-up in the event that there were technical problems with the recording technology, but also to include reflective notes, including key expressions, "speculation[s], feelings, problems, ideas, hunches, impressions, and prejudices" (Bogdan & Biklen, 1992, p. 121). These notes were used as prompts at the time and at the transcription and analysis stages as the researcher considered relevant themes.

Morrison (1993, p. 63) points out the value of video recording to provide the non-verbal as well as verbal responses for the astute researcher. The videoconference was fully recorded (both sides of the interview) and downloaded in electronic format (MP4) to the researcher's computer for transcription and secure storage. This has the advantage of being securable alongside subsequent data (also in electronic format). The full electronic record is a permanent record, and was supplied to those participants who requested it.

3.6 Data analysis

The video record and transcription (manually, by the researcher/interviewer) was found to be a very useful resource, easily accessed and bookmarked, making it easy to rewind to recheck wording and intonation for transcription and meaning analysis. The transcription focussed on the key words or themes identified in the literature (although 'silences' were also noted), as well as any new or significant concepts or terms that arose during the interviews. However, the researcher often used the electronic records rather than the transcriptions during analysis due to their ease of use.

Early selection of "significant features for future focus" (Cohen et al., 2003, p. 147); "reduction" and "interpretation" according to Marshal and Rossman (1989, p. 114), helped to reduce 'data overload'. This challenging phase, where coding was used to "reflexively reduce" the data to important themes (Creswell, 1994, p. 154), used some aspects of the eight step sequence for

unstructured data detailed by Tesch (1990). The reflexive approach recognised the mutual interdependence of social contexts and the importance of the participants' own descriptions and analyses. Several readings (or viewings of the video recordings), and sometimes re-codings, were required to become comfortable with the categorisation, as required for the following chapters. A constant comparative process (LeCompte & Preissle, 1993) was one of several tools where "data are compared across a range of situations, ..., groups of people, and through a range of methods" (Cohen et al., 2003, p. 151). The researcher kept the four stages in mind (Glaser & Strauss, 1967), as well as Lincoln and Guba's (1985, pp. 354-355) warnings about acting on first impressions only or ignoring unexpected data and disconfirmations. Propositional statements were eventually developed that were internally consistent and replicable – important goals according to Lincoln and Guba (1985, p. 347). Importantly, the researcher noted actual data to justify the inferences, theories and establish reliability - many of which are included as quotations of participants' own words in subsequent chapters.

3.7 Summary

Having established the methods and techniques used to generate and conduct the initial analysis of the data about collaborative cluster leadership, the next chapter will present a detailed analysis primarily based on the themes developed in the literature review. All responses from the participants, having reviewed the initial transcriptions (or recordings), have been incorporated into the process. This researcher recognises that the reflections and knowledge generated may be considered "partial" only, since they are "neither complete, fixed, disinterested, universal, nor neutral but instead situated, local, interested, material and historical" (Horner, 2004, p. 14).

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

Conversations with the research participants revealed both commonalities and differences within their shared world of educational leadership; the commonalities outweighed the differences, but the differences were perhaps more interesting. The commonalities tended to be based on similar school leadership experience, similar e-learning projects and shared leadership roles at the national level, while any contrasts were more likely based on the differences in their cluster's goals, programmes and strategies for achieving them. All the Lead Principal (LP) participants were longserving rural secondary principals who at the time were leading some of the stronger e-learning clusters across rural NZ, connected to the Virtual Learning Network (VLN). Subsequently, these participants either: retired; moved on to establish a new urban school; became an educational consultant or employee of the MoE; or continued to lead national e-learning development. They were spread right across NZ and had developed their leadership styles guite independently, but more recently had become collaborators (more or less) mostly as cluster Lead Principals within the VLN, with three becoming collaborating eMentors in the national ePrincipal (eP) leadership development programme. Even so, their stories remain uniquely local, interested and historical (Horner, 2004), so this chapter aims to provide an accurate overview of their views, noting also special or divergent points, through the deliberate and extensive use of quotations to provide the raw evidence of their personal perspectives.

The perspective of this researcher combined with the necessary analysis, led to a unique research focus and outcomes. The data are reported here thematically in approximate sequence determined by the research subquestions, with verbatim excerpts to illustrate all key concepts. In the following two chapters the data will be compared to the key themes from the literature review, and conclusions drawn.

The participants provided many informed, perceptive and practical ideas about successful collaboration; so much so that data reduction was a practical necessity, as noted in the methodology. The researcher selected, omitted, and prioritised the ideas and quotations, guided by the trajectory of the research questions. Consequently, great care was exercised to preserve the essence of the participants' personal narratives about collaboration and leadership, to faithfully represent their contexts, and especially to respect the mana of each person – all of which reinforces the significance of their words and which they richly deserve.

4.2 Question One

How do New Zealand's e-learning cluster collaborations operate in comparison to the range of possibilities as promoted and used internationally?

All leadership has a context, and these e-learning clusters in NZ are a particular context for specific collaborative projects. The VLN e-learning clusters (as four of these were) distinguish themselves through their shared videoconference-based (VC) senior subject programmes (Roberts, 2009), now often referred to as blended learning (Graham, 2006), although they have done or still do run a variety of other types of collaborative projects. This creates a daily management layer (Chapman et al., 2010) to their leadership and development (as evidenced by the operation guide (Ministry of Education, circa 2009)) which seems not to be required by other more typical ICTPD-type collaborations, such as that which the fifth cluster Lead Principal led. From the evidence collected it seems fair to say that the VC clusters had initiated a much wider range of collaborative projects and programmes than that of the more typical ICTPD cluster. It is therefore necessary to provide an overview of their management structures and their shared projects and programmes, which were the context for this range of collaborative leadership activity, before having a closer look at their collaborative leadership practices.

The practical aspects of cluster management and structure addressed under this question include: cluster management and Lead Principals (LP); principals' and Boards' of Trustees (BoT) roles; cluster programmes and projects; collaborative technologies; new leadership roles and positions; collaborative structures or policies; and national collaboration. Leadership issues are addressed more closely in Question Two (section 4.3). In order to preserve anonymity, the Lead Principal participants have been given pseudonyms (which preserve their gender): Marcos, Sandy, April, Gus and Kurt.

4.2.1 Cluster formation and Lead Principals

The Virtual Learning Network clusters self-formed in a variety of ways, mostly in response to a national Ministry of Education (MoE) initiative of cluster-based three-year contestable-funded Information & Communication Technologies Professional Development (ICTPD) contracts, a programme which ran from 1998 to 2012 (Ham & Wenmoth, 2010). This led to a variety of management structures, leadership strategies and approaches to facilitation in these clusters as they responded to the MoE's annual request for proposals (RFP), such as Ministry of Education (2011). These clusters' proposals and contracts focussed on vision, programmes, pedagogy, personnel and budgets – with the obvious emphasis on ICT integration and effective pedagogy in face-to-face and/or virtual classrooms, now more commonly referred to as e-learning. (E-learning is also synonymous with videoconferencing in some contexts (Powell & Barbour, 2011b).) The goals and project-mix varied depending on the clusters' aspirations, as did their leadership strategies.

4.2.1.1 Project aims and goals

Documentary analysis of some of OtagoNet's unpublished funding proposals provides a snap shot comparison of the development of their aims and goals, otherwise expressed in Pullar (2002). About nine years ago these were the aims and goals expressed in a Collaborations & Innovations Fund application:

 Aim – 'to widen and enrich the educational opportunities for Otago rural Area and secondary school students and enhance teaching and learning', whereas a very recent

Objectives

- 'capability, sustainability and growth', re leadership and management resourcing;
- 'reduce disparities', re learning specialisms, Te Reo Māori, student eSupervision, virtual departments
- 'utilisation of digital opportunities', re VC innovations,
 collaborative PD, eTeacher time and PD;
- 'extend collaboration', re connections to other clusters, tertiary connections, extension to primary depts., senior management collaboration.
 (OtagoNet, circa 2003)

An example of goals written last year for OtagoNet-DunedinNet Communities of Schools (24 schools), are summarised here:

Central focus – 'to develop teachers' capability (and schools' capability) for personalising learning for students, particularly students working in blended learning environments';

Goals

- 'Personalising students in blended learning environments', re ownership, engagement, skill, mentoring, use of digital technologies, support systems;
- 'Building community / Building relationships', re OtagoNet and DunedinNet, shared culture, tertiary & ITO opportunities, primary schools, and Ngai Tahu (tangata whenua);
- 'Connected teachers / Leadership for learning', re
 Communities of Practice, small group mentoring, DL and Leadership for Learning models;
- 'Connected schools / Connected 'Communities of schools', re use of digital technologies, shared hosting, UFB, increase programmes of learning, school-based Community Learning Centres'; and

 'Knowledge creation and dissemination', re innovation and research, CoPs, University of Otago, publishing. (OtagoNet, 2012)

There is evidence here of important conceptual and practical development that will need to be considered in more detail later, in comparison to the literature.

The other aspects of cluster operation and management strategies noted in this section below include: the Lead Principals (LP) and management; decision-making processes; the Lead Principal role; and Lead Principal and their ePrincipal (eP).

4.2.1.2 Lead Principals and management

All clusters were overseen by their principals' group or Trust, with their chosen Lead Principal as chairperson and/or contract Director. All participants spoke of having a strong personal vision which became a shared vision, from which the cluster was formed. Sandy's words were: 'it wasn't so much about my vision, it was the shared vision that the principals group had'. These Principals' groups met typically 4 to 8 times per year. Sometimes it became a 'VC once a week ... we all looked forward to Wednesday afternoon [VCs]' in new-project development phases; both face-to-face and via technology. Lead Teacher management groups often met more frequently, 'plus daily emails and a role in hui²' (Marcos). Frequent communication (every LP made reference to this), and for some clusters 'annual hui' or retreats (Gus, Marcos), enabled 'our principals, trustees group, [to] make[s] decisions about strategic vision and strategic outcomes' (April), including the key financial and staffing decisions.

4.2.1.3 Decision making, dialogue, consensus

Decision-making processes used by these groups of principals are referred to, explicitly or implicitly by all participants, as 'by consensus', 'most

² Hui – Māori word for gathering, meeting or conference

decisions were discussed to the point until there was some consensus of action' (Gus). Dialogue was referred to often: 'challenging dialogue about learning' (Sandy), with clear descriptions of key dialogic processes in project conception and decision making (specified elsewhere in this chapter). Two LPs specifically detailed a deeper consultative approach in cases where the decisions would impact on other leaders in schools; relevant staff members, particularly those showing signs of e-learning leadership, were asked for their opinions. Kurt referred to including, 'people actively using IT' in their classrooms, 'as opposed to the IT teacher'.

However, a couple of participants (Kurt and Gus) also referred to votes taking place after comprehensive dialogue, where the results were not unanimous. As Gus put it: 'it's open, in the sense that everybody had an equal say, and it was by consensus ... [but] there were times that you would take a vote'. A culture of 'corporate responsibility' and 'unity of action' (Gus) was noted as the dominant policy, especially important if a vote was not unanimous. Interestingly, this policy was related by both LPs, even though one lost their vote and the other didn't. (The votes were about using, or not, particular technologies.)

Regarding a Lead Principal's personal decision-making authority, Kurt said this was based on the 'moral authority' the group gave him rather than any formal legal or policy definition; based on ceding 'a certain right to the leader of that group to make decisions ... on behalf of the body ... as long as the leader of that group is accurately representing the needs and wants', while Marcos referred to his long experience with the region's principals as the qualifier.

4.2.1.4 Lead Principal roles

There was a typical set of roles for LP/Chairpersons described in the interviews, but of note was their relationship with and reliance on their Facilitator/ePrincipal (F/eP). 'Once we had an ePrincipal ...' was a phrase that Sandy used which ultimately led to the description of their various roles. Usually the LP was also the Director, handling the contract requirements with the MoE/CORE Ed Ltd, covering mainly legal, financial and reporting requirements, along with the business plan development and the

employment of the ePrincipal/Facilitator; Gus referred to the Director's role regarding their 'business plan'. Programme management tended to be handled by the ePrincipal or Facilitator, perhaps with a separate management team if it existed, in conjunction with their LP; the different variations of leadership relationships make an interesting study – later. In Marcos's cluster (the largest), the group of Lead teachers, called the Lead Implementation Group (LIG), most of whom were schools' Deputy Principals (DPs), dealt with all operational and management matters for their videoconference (VC) school with their ePrincipal. Marcos' principals appeared to fully delegate all cluster matters; 'the LIG didn't actually involve the school principals to the same extent as ... the senior players in [the cluster]', (meaning their deputy principals), leaving each principal to be 'more of a support person' (Marcos) for their DP/Lead Teacher. Collaboration was clearly evident in: 'the ePrincipal .. ahm ... absolutely makes the most decisions, ahh, but then he works with, generally, the LIG ... [or] back to the principals' meetings'. In the other four clusters most management decisions were made by the LP-eP team, typically meeting every two weeks.

4.2.1.5 Lead Principal and ePrincipal

From the interviews all participants clearly believed that 'the ePrincipal is a vital part of cluster leadership' (April); all relied heavily on this new collaborative leadership and management position, akin to a typical CEO. This role was most often designated as 'ePrincipal', abbreviated from eLearning Principal, though this title has no legal recognition and is still a matter of debate as Gus indicated. Sandy referred to 'empowering an ePrincipal out of our own operations funds' as the 'most significant decision' they had made, with three other LPs specifically mentioning the importance of cluster self-funding of the eP role. Marcos' cluster had elevated their ePrincipal to be an equal member of their regional principals' group, who also 'chaired the rural [cluster] meeting ... and set the agenda' in regard to VC School matters. Marcos saw his own role more as a coach to his eP, 'a voice of reason, I was a moderating influence' for the eP, rather than being project leader. Kurt's cluster, which focussed on teacher e-learning PD only, specifically excluding a VC school, also specifically rejected the

'ePrincipal' title with its 'VC School connotations', instead preferring the 'Facilitator' (F) title.

All five ePs and F were given remuneration relatively equal to a typical rural school Deputy Principal position (which had no common precedent in NZ schools), but often with very different conference of status. Marcos' was seen as equal to their principals (as above), while others were: equal to a DP, 'the same kind of authority as at least a Deputy Principal' (April); two who were seen as unrelated to management, 'their status is not the same as a deputy principal ... didn't sit in on any senior management' (Gus, and Kurt). Naturally enough, all ePrincipals 'sat in, and reported to ... the[ir] ... management cluster' (Gus) of principals, at the very least.

4.2.2 Principals' and Board of Trustees' roles

Clearly all principals made the 'policy decisions' (Gus) within their own schools, but with varied involvement of their Board of Trustees (BoT). Marcos' BoT had 'bought into it big time', while at the other end of the scale April admitted that the cluster project hadn't been before her BoT. Sandy considered that 'it's important for the principal to keep the board up with the play' especially regarding funding needs. Gus' boards received written reports from the facilitator/eP every six months.

A wide range of principal-actions to support teacher development were mentioned, ranging from financial support and release time (Kurt), to personal modelling of e-learning (Gus). Common themes included pedagogical change (primarily through and for e-learning) and attempts to create a learning culture. Supporting ideas included: changing existing and supporting new leadership roles; the centrality of building relationships and learning in groups; with all recognising that 'the most powerful thing a principal can do to change pedagogy in your school is to actively partake in professional learning [with staff]' (Kurt). Two LPs referred to 'Guskey', a well-known write on effective PD strategies. Other comments related to: employing a full-time computer technician to support teachers (Marcos); funding site-based professional learning (PL) rather than expert-episodic

(Marcos); and creating a safe staffroom and weekly learning time where staff could enjoy 'challenging dialogue' about learning (Sandy).

Generally speaking the Lead Principals described building a collaborative learning culture within their schools as well as across the cluster; they were consistent in their practice of promoting collaboration. As Sandy said, 'it's important for a principal to verbalise the importance of collaboration and the learning that can come out of it ... also to be quite strong ... an expectation that their teachers collaborate with other teachers across the cluster'; 'principals have to set the standard'.

4.2.3 Clusters' programmes and projects

The range of programmes that clusters adopted, as reported by the LPs, fell into two broad categories. Firstly, those mentioned which were directed at students, such as:

- The VLN/VC School for shared senior subjects and classes; weekly one hour videoconference lessons (VCs); various e-learning tools; annual hui, etc.;
- Student leadership development (e.g. Tech Angels students leaders supporting teachers);
- Scholarship Mentoring for Year 13 students via VC;
- And programmes for Gifted and Talented students;
- with spin-offs for those teachers involved.

Secondly, those which were directed at teachers, such as:

- Pedagogy/e-Learning/ICT/21st Century Learning PD/PL for all teachers:
- Collaborative Faculty Groups (CFGs) for shared PL (called Virtual Subject Depts. in Gus's cluster); and its associated Virtual School website
- Shared assessment and moderation strategies (e.g. Literacy and asTTLe data analysis);
- Special cluster-wide hui* (e.g. review/planning meetings) for leaders;
- So-called Jumbo Days or conferences for teacher PL;

- Specialised ICT training (e.g. VC teaching, LMS/OLE use), structured or 'just-in-time':
- Shared Extending Higher Standards Across Schools (EHSAS)
 projects; typically where one strong school mentors other weaker
 schools, or as Marcos said: 'each of the schools is taking
 responsibility for one of the initiatives, and then sharing that
 expertise among the other three schools';
- A School Improvement Initiative focussed on planning for Māori student achievement (April),
- with their intended spin-offs for student outcomes.

Cluster's position:

There were also references to related ICT infrastructure development, (e.g. shared network or internet connection improvements) and use of a variety of shared learning management systems (LMS). Marcos mentioned student social and university connections via VC, as well.

Three of the clusters appeared to emphasise the VLN/VC School as their main strategy, one of these also organising the VC-based Scholarship Mentoring programme for all other clusters nationally. A fourth prioritised the Virtual Depts. and ICT/e-learning PD, but maintained a vital VC School, while the fifth cluster focussed purely on teacher ICTPD and 'a complete swing in pedagogy' (Kurt), having excluded any formal VLN/VC School involvement. A continuum of the project-mixes for the five clusters, around the variety of conceptions of e-learning, (from 'VC School' exclusively to 'e-Learning in the Classroom' exclusively), based on interview comments,

Figure 5 E-learning projects continuum

The e-learning goals and projects of each cluster appeared to determine the: role(s) of their ePrincipal or Facilitator; use of particular technologies; other new collaborative roles developed, and perhaps the types of leadership employed.

4.2.4 Collaborative technologies used

Shared technologies across clusters included:

- VC codecs (equipment), associated peripherals, broadband (IP VPN), Adobe Connect and Skype;
- An OLE using an LMS (e.g. Moodle, KnowledgeNET, Google Sites);
- Email and SMS;
- Common software, freeware or websites (such as MS Office, Audacity, Hot Potatoes, BBC, Skype);
- Online social media;
- Key connecting technologies from the MoE, (e.g. the VC Bridge and the VLN's cross-enrolment website, http://pol.vln.school.nz/);
- Internet Protocol (IP) based fast broadband; later on ultra-fast broadband (UFB);
- Common communication tools such as phone, mobile and fax systems; and
- Marcos' cluster piloted shared UFB internet connectivity with one 'cloud' based server for all of three schools' IT functions.

The range of collaborative projects and tools was comprehensive, innovative and always being extended somewhere within these clusters.

4.2.5 New positions and roles across clusters

New leaders and management roles and systems were required, not least because a principal's in-school 'job is so diverse, so demanding': as Marcos recognised, 'e-learning was a very small part of their whole complex [job]'. This section on leadership roles will focus simply on positions and

structures, whereas the next question addresses collaborative leadership ideas and practices more fully.

The Lead Principal role was perhaps the first new cluster role, becoming contractual (to the MoE and/or cluster schools); administrative (Director) as well as inspirational, especially in regard to the new cluster staffing and funding.

However, from the interviews, these Lead Principals (as mentioned above) clearly relied heavily on the new leadership role usually designated as 'ePrincipal'. They agreed that the ePrincipal 'needs to have a high status – can't be just a dogs body that does admin', someone 'with real credibility and has the professional respect of the principals. Somebody they feel understands their jobs' (April). Gus considered his eP to be 'more equivalent to say a curriculum development officer'; agreeing with Kurt, who stated his eP had the 'same pay but not the same status as a deputy principal'.

The largest cluster, with its LIG management group, fostered a range of projects at different times, but appeared to primarily focus on development of their VC School, supported by several new roles, including:

- eTeachers (eT), one online teacher per school (sometimes two), a matter of policy (common to all VLN schools);
- Lead Teacher (LT) per school, their main liaison person; mostly DPs (who make the LIG);
- eDean (eD) per school, co-ordinating e-learning for their eStudents;
- eLibrarian for cluster, responsible for the cluster's online resources for VC students;
- Lead eTeacher who led eTeacher PD, also trained new eTeachers nationally; a very experienced eTeacher;
- Reference was also made to a specific teacher-technician who led the early technical development across all clusters, with a major national TELCO.

This cluster had developed a comprehensive and sophisticated range of roles and leaderships to support their various goals, many of which (sooner

or later) supported national development also. The in-school eDean role seemed to be a common practice across all VLN clusters, but most clusters combined the eDean role with their school's Lead Teacher person. However, Gus' described how his eDean handled *all* VC School leadership and administration, with his eP not involved at all in VC programmes. Willing Heads of Departments were also often volunteered to lead CFGs per subject across clusters.

Specialised collaborative programmes such as Gifted and Talented or EHSAS were only briefly referred to by these LPs. Apparently they tended to develop their own separate leadership structures with the cluster ePrincipal as ad hoc support only.

4.2.6 Collaborative structures and policies

4.2.6.1 Policies

Collaboration or cooperation generally was an assumed strategy across these projects; it was always part of any official cluster project proposals and MoE contracts (one typical range of contracts was titled Collaborative Innovations, (OtagoNet, circa 2003)), but no Lead Principal interviewed pointed to any formal policy regarding governance structures, nor formal collaborative leadership policies or management strategies, (other than some roles with 'job descriptions in the early days', April). A typical statement was: 'There were no leadership policies it was up to the Chair' (Gus). However, there were clear personal beliefs about collaboration and school autonomy expressed by most LPs, which they believed were shared by their principal-colleagues, more or less.

4.2.6.2 Federations

The emergent nature of the various management structures is best summed up by Marcos' statement: 'It's not what I would call a model that you would want to happen ... it was lucky that it happened, we had the right people at the right place at the right time', thinking of their three schools' DPs who led the way. Kurt was more able to clearly define his view of what their collaborative structure was *not* – that it was not a 'federation', which 'prescribes on a federal basis ... tak[ing] away a lot of autonomy from the individual members of the confederation'. Instead, he considered it more

like 'a fairly archetypical quango'. To explain he stated: 'there is no expectation ... for schools to make themselves a mirror of the cluster. Nearest analogy is probably ... like UNESCO. A quasi-autonomous non-governmental organisation – it's a body that sets overarching sort of goals, and then resources those goals ... and it asks other groups (vis a vis schools) to ... partake of what is on offer. It's more Commonwealth than USA'. He was clear that they saw the cluster as a 'service provider...' with optional buy-in: 'you make the arrangements that suit you as an individual school, to buy into and be a part of what we're doing as a cluster'.

While policies regarding cluster staffing were clearly agreed at principal group level, interpretations or practices in-school often varied, as more than one LP noted. It was clear that school sovereignty was sacrosanct in the minds of participants; there was 'no dictating to each other' (Gus) in any cluster. However, the LPs themselves identified closely with their clusters, with Gus going so far as: "I never thought of school individually...it's just part of [the] cluster", but several participants described variable commitment from some of their fellow principal collaborators.

4.2.6.3 Development proposals

Regarding published models, policies and philosophies, Marcos' cluster's two ePs have circulated documents about Blended Learning and Communities of Practice (CoP) (Centre for Educational Leadership and Administration, 2012; Pullar & Brennan, 2008), as well as proposals for new collaborative structures (OtagoNet, 2009). Two other ePs have jointly developed a proposal regarding shared technological development nationally, referred to by Gus as a clear example of their leadership. More recently, all ePs and most LPs have contributed to the potential restructuring of the national collaboration into a Trust, mostly via the national list-serve and biannual hui (Roberts, 2008).

The extent of national collaboration is reported next.

4.2.7 National collaboration – structure and policies

EPrincipals began to collaborate for shared VC School systems (technologies, student enrolments, assessment, reporting, etc.), from 2003

when the second cluster (CoroNet) began operations. The background to the VC School and VLN is covered in some of the literature review, and was not a focus of the interviews. It is, however, the main context of this investigation into collaborative leadership and was referred to at times by the participants. The three participant LPs involved in the formation of the Virtual Learning Network Community (VLN-C) national Trust, who also mentored some of the ePs, had strong opinions supporting the strengthening of a national leadership and structure.

Regarding national leadership development, some representative statements were:

Sandy:

- It is 'uncharted territory, we're at the cutting edge, it's new stuff
 ... the model that's operating at the moment is ... pretty successful', and 'it's not too prescriptive';
- 'It's a very delicate kind of development of leadership because it requires a different kind of leadership style';
- 'we're asking them to build strong relationships and strong collaboration, there's a dichotomy there' – she was comparing these emergent leaders to 'gifted and talented kids';

• Gus:

- o 'This funding for the 12 clusters is ... showing true collaboration. There's been a natural tendency for those people who are running these clusters, leading these clusters ... to actually share, be collaborative with one another.'
- 'I think ... [it is] really good'; 'what the ministry has paid for is starting to have an effect' ... 'on the national scene ... this is proving to be a really good model';
- O He 'had a debate with himself' about the kind of leadership being developed, 'it's almost like servant leadership', 'I don't see them as what the old idea of being a leader was ... not inspirational ... not the old charismatic one, you know, follow me into battle type of thing', and in relation to a technology proposal to central government, 'they're doing a service ... for

all the principals, without the principals really knowing what they are doing'; and

Marcos:

- 'I'm thoroughly enjoying being a part of this national cluster of schools ... I'm captured by the huge amount of energy and initiative that there is ... most impressed ... that there is a group of ePrincipals who are absolutely willing to share, to make mistakes, ah, to try things, to critically support others. It's probably, um, the most energising group of people I think I've worked with, ... all have got a good big-picture vision that is good for the future of this country';
- 'There are some synergies here that I think would work really well'; 'I think that one of the benefits of education in NZ is that we are a small country so that we can work small when we want to but because we have got a national curriculum, one of the few in the world I understand, we can work as a large group when it suits us and that's the model I favour in terms of collaborating. So there are opportunities where a group of people can represent all the clusters throughout NZ and get together and to work out ways of improving it for everybody nationally but still retaining that regional flavour'.
- o 'I am mentor on a one to one basis for a group of ePrincipals, ... I see it as a natural thing, ... I can support them ... when they have to deal with, ah, school principals'. The 'leadership development ... is the one, the ... performance appraisal which I have with the ePrincipals ... as an eMentor'.

The personal beliefs and rationales of the LPs around collaboration and leadership practices are presented in the following section addressing research Question Two.

4.3 Question Two

How do the collaborative processes and leadership used by the Virtual Learning Network e-learning clusters compare to those purported by the literature to be systemically 'transformative'?

The participants spoke mostly regarding their own cluster's collaborative practices – as was intended – with their primary relationships being with the other Principals, the relationship with their eP coming in a close second. Thirdly, fostering collaboration and learning cultures within their own school featured highly, followed by the development of national collaboration. Three LPs and their ePs clearly shared a vision that was national in scope, as detailed above. These are reported here for later discussion.

The responses that address this question are reported under these subheadings:

- Lead Principal collaboration with other principals;
- Lead Principal collaboration with their ePrincipal;
- Lead Principal leadership nationally;
- Lead Principal leadership in their own schools;
- Responses to questions about leadership styles and policies; and,
- Ideas about the development of learning organisations.

4.3.1 Lead Principal collaboration with other principals

The collaborations these participants headed were based on strong personal visions for educational improvement and significant pedagogical change, but all stressed one way or another, that: 'It was about the shared vision that the principals group had, not about my vision' (Sandy).

4.3.1.1 Lead Principal vision

Representative statements or key words regarding included:

- 'Rural students may be advantaged by technologies'; 'high quality opportunities';
- 'Pool our resources ... try and achieve the grand goal of ... e-learning
 ... as it is expressed in the ministry document';
- 'Sharing of expertise between teachers'; 'teachers are confident ... can integrate e-learning practices; creating online learning communities';

- 'There is a complete swing in pedagogy across the board'; 'combination of face-to-face and anytime, anywhere, anyplace scenario [blended learning] ... is ... the way of the future';
- 'There needed to be ...a sense of belonging'; 'that the cluster was integral and fundamental to what each individual school was doing'.

However, Marcos' cluster was initiated by three senior managers (DPs), two of whom had done 'most of the policy writing', having 'done a whole heap of research'; being 'at the top of their game'. Marcos admitted that initially he 'didn't have that e-learning vision, I just had a vision for what students might need and want', whereas 'for the ePrincipals that was their entire focus'. More recent re-visioning and strategic planning seems to have become more inclusive in some other clusters, with at least one cluster (Gus') inviting their Lead Teachers along to a two-day retreat with the principals.

4.3.1.2 Implementing the vision – relationships are key

One might think that with an apparently clear strong shared vision the collaboration process would be straight forward. Instead, LPs talked a lot about the real work involved in leading collaborations, including leading their group of principals. Sandy recognised 'the pivotal role that leadership plays in collaboration' emphasising that 'collaborative leadership is about building effective relationships'. Other statements illuminating their understandings were: 'Interpersonal dynamics are paramount' (Kurt), and it's about 'providing environments where ... you get beyond just talking about systems and processes, where you're actually having challenging dialogue about learning' (Sandy).

All LPs spoke discerningly, reiterating the importance of 'friendship' as the basis of collaborative professional relationships, about frequent and open communication. They often described their style of leadership as crucial for dialogue, consensus decision-making and effective collaboration, with typical comments such as Gus': 'It wasn't dictated by me, I just chaired it, and I tried to ensure that all principals had a say ... I was just the facilitator';

where meetings (for Sandy) 'start[ed with] ... a bit of off-loading ... [to] understand the context that a principal's bringing to a meeting'; that you've 'got to acknowledge that its tough at times ... [before] having challenging dialogue'. Most LPs, like Sandy, intimated that: 'I'm doing as much listening as I am talking; expecting to give my point of view ... and to listen to what they had to say, and only agree if I felt comfortable about what the majority seemed to be wanting'. Kurt said they 'debated issues', not personalities, where 'people were quite able to say [their position] ... and everybody is listening'. While April admitted that their 'level of collaboration could have been better ... we've only just started on the journey', she stipulated dialogic strategies such as: 'if a criticism comes to mind, just let that lie, and um, and think a little bit more behind what you are hearing' consistent with the others. All believed in the synergies of collaboration, that it 'is about allowing me to hear your ideas and build on those'; that it was a 'good meeting ... if we have moved along the continuum philosophically as a group' as Sandy said.

4.3.2 Lead Principal collaboration with their ePrincipal

Descriptions of the Lead Principals' working relationship with their ePrincipal varied considerably, depending on the role and status of the ePrincipal (as outlined above). According to Marcos, his eP 'absolutely makes the most decisions', with 'mutual deference' the common attitude in his relationship with his principals and DPs. Most ePs managed their VC School in association with their schools' Lead Teachers. At the other end of the continuum (see Figure 4) in Kurt's cluster, where the eP was primarily a Facilitator, the leadership role was focussed on expert direction and delivery of PD. 'We look to our facilitator for ideas. His role is facilitation and divination ... divinely gifted in determining what's going to happen in the next year ... determining directions ... picking up on the vibes'. As for Gus' cluster, he is 'responsible for the overall development of a business plan'; 'the status of that person ... is that they are highly respected. They sat in, and reported to the ... management cluster ... contributed to discussions'. Gus quoted his eP's own statement: 'You'll make the decision where we are going and I have to make it happen'. As Gus said, LPs are there to make things work for their eP; 'I would try to figure out how I could help him ... the principal is there to resource it, to make it happen ... through words, actions or financial resources'.

4.3.3 Lead principals on leadership development

Three Lead Principals responded to the question about leadership policies and development by talking about the new national ePrincipal Leadership development programme – their comments reflecting their commitment to and experiences as leaders of this programme. The other two LPs both talked about development of teacher leadership at this prompt, but via apparently ad hoc processes, rather than any formal policies or strategies.

4.3.3.1 Cluster leadership development

New teacher leadership roles were spoken of positively: 'I've always talked about ... always encouraged teacher leadership' (Sandy), but more than once this was said to be a matter of 'practice rather than policy' (Marcos). For Kurt, rather than being 'charismatic', they were selected as 'incredibly competent in ICT ... experienced teacher of teachers ... each school picked their Lead teacher using parameters ... applicable to their school ... [guided by the cluster's] generic job description'. April admitted that, 'I don't think we've got leadership policies ... might be some sort of understandings'. Gus reported 'no policy or strategy', but the common view was clear: 'all we're trying to do is, we're trying to empower teachers'. Modelling was important to Gus: 'it's up to the chair, my style was very open'. Marcos referred to possible refinements of their existing leadership roles (as their cluster anticipated expansion), but the only formal policy on leadership development was the 'mentoring of the ePrincipal[s]', the newly funded national project.

4.3.3.2 National leadership development

Regarding the national eMentoring project, Marcos spoke effusively about 'being captured by the huge amount of energy and initiative ... most impressed with on a national scale ... ePrincipals who are absolutely willing to share, to make mistakes, ah, to try things, to critically support others'. Like the other two Lead Principal eMentors, he was mentoring 'on a one to one basis a group of [4] ePrincipals'. Sandy referred to the programme as being in 'uncharted territory ... we're at the cutting edge' and examined at

some length the challenge for the ePs, believing that 'it's a very delicate kind of development of leadership because it requires a different kind of leadership style, and it's with people who may not have chosen to go into leadership in a traditional education setting'; where 'these people may not have seen relationships as part of leadership in the past ... we're asking them to build strong relationships and strong collaboration, there's a dichotomy there'. Gus believed that this project was showing 'true collaboration', 'building the capacity to ... innovate and experiment with online learning'; with all three agreeing that the 'national scene ... is ... proving to be a pretty good model'.

Regarding the leadership being developed, Gus admitted to a personal 'debate, amongst myself'; 'is this traditional leadership or is it some other type ... it's almost like servant leadership?' He didn't see them as 'the old idea of being a leader ... they're not inspirational ... not the old charismatic one, you know, follow me into battle type of thing'. No other Lead Principal referred to servant leadership or any other type (in the positive), although a couple referred to the technological expertise or leadership of their ePrincipal.

4.3.4 Lead Principal leadership in their own schools

While all the Lead Principals often pointed to the on-going work of their ePrincipal, with the preference that 'the less they [the principals] have to do after the meeting the better' (Sandy), they all related aspects of their responsibility to lead in their own school. All had a very clear focus on 'on-going professional learning' with collaborative PL strategies focussed on 'pedagogical change' (Kurt), understanding that their personal involvement was key. As Kurt put it: 'You must be absolutely committed to it yourself as principal and you must make sure that you partake of it, or be part of it ... I've made a point of going into those groups ... seeing what we can do to help'. Another repeated idea was their modelling role: for Gus, 'I think leadership is hugely important, the staff saw me as vitally interested in learning'; with several LPs using the phrase: 'I'm the lead learner' (Sandy and April), with a sense of shared journey, 'they're also learners ... so we're on this together kind of thing' (April); and a general recognition that

'pedagogical development comes a lot from coaching, modelling, mentoring' (April).

Another common strategy was fostering teacher leadership (although no one could point to a formal policy): as April put it, 'the team approach is about finding people with the skills that I don't have; planning ... devolves down'; seeing new 'leadership roles for teachers who embrace e-learning'. Supporting collaboration enabled by e-learning for their teachers was seen as the key to development ('collaboration ... see that e-learning enables that' - Marcos), as for the whole clustering strategy. There was a raft of practical actions referred to by the five LPs, which they saw as directly supporting e-learning and pedagogical change. The next section on Question 5 details a range of these.

4.3.5 Leadership styles or policies

Some responses about leadership styles and policies were explicit; others were implied as the Lead Principals described the decisions and actions of their cluster's major players.

4.3.5.1 Practice not policies

Most LPs admitted to having no written leadership policies (other than the national mentoring of the ePrincipals), referring to their own leadership actions using phrases such as: 'did not dictate' (Gus), 'created a safe place' (Sandy), 'just the facilitator' (Gus), along with recognising the 'pivotal role that leadership plays in collaboration' (Sandy). All emphasised the importance of relationships; as Kurt put it: 'collaborative leadership of the cluster comes down to the effectiveness of that relationship between the principals ... your interpersonal dynamics are important'. Several participants detailed a range of relationship-building strategies. Speaking of a lead principal's 'moral authority' to lead, Kurt (the only one who did) said: 'you cede a certain right to the leader of that group to make decisions or to speak on behalf of the body. As long as the leader of that group is accurately representing the needs and wants and wishes of that body, then they have the moral authority to lead ... and you can ask or discuss with

someone to do, or to follow a particular line'. He concluded, however; 'of course it is very ephemeral'.

4.3.5.2 Collaborative leadership

Collaboration leadership was: the 'highest value', 'loved', 'open style'. The few references to specific leadership styles were: in the negative regarding 'charismatic' and 'transformational' twice (Gus and Kurt); very positive about 'collaborative' by all; with one perhaps a little ambivalent about 'servant leadership' (Gus). The only definition of collaboration offered was the synonym 'teamwork': 'I think of that as meaning teamwork' (April) and 'I ... love being collaborative, love being a part of a team' (Gus); as April explained, 'the team approach is about finding people with the skills that I don't have.' Perhaps Gus' comment in the context of the eMentoring programme sums it all up: 'Right back from those first days ... there's been a natural tendency for those people who are running these clusters, leading these clusters ... to actually share, be collaborative with one another'. He also pointed out what others implied, that 'collaborative leadership is not about your ego, it's about the good of the whole rather than the individual ... [it] is about getting the best for every kid in the cluster, and giving them the environment and potential to learn, and for teachers too'. participants were very committed to collaborative projects and used collaborative leadership practices.

Collaborative leadership was developed at multiple levels within these clusters and schools, including for some Heads of Department (HoD) who led the subject based Collaborative Faculty Groups (CFG), overseeing teachers' collaborative learning, as referred to by all of the LPs. Even some students' collaborative skills were developed through the Tech Angels project where they were taught to work with teachers as technology facilitators, as Marcos reported: 'where kids were taking responsibility for um more leadership, technical leadership roles within their schools'.

4.3.5.3 Distributed leadership

Distributed leadership was referred to by all, once prompted, with multiple examples provided, but often seen as having 'evolved', rather than being

'conscious' or deliberate. For all, the most significant new leader was their ePrincipal or Facilitator, shown not only by direct statements but by the frequency of their references to the eP role or person. Marcos described how he elevated his ePrincipal to be an equal member of the principals' group: 'I sought permission for [his eP] to join the [regional principals group] as a legitimate member of it, so that it gave him some clout and some credibility ... he would then chair the rural meeting ... and set the agenda', but added later that 'funnily enough, there's never been one person running the show' due to their collaborative approach to leadership. All participants agreed that the eP/F exercised 'leadership on a one to one, or with their peers, the teachers ... [to] empower teachers' (Gus).

4.3.5.4 One formal policy – eMentoring of ePrincipals

It was clear that the 'only formal policy is mentoring of the ePrincipal' (Marcos). The three Lead Principals reinforced the 'importance of collaborating at a national level', where ePs were being mentored to develop their personal 'leadership targets ... developing ... leadership style' (Sandy). Sandy shared her belief that it is 'very delicate ... requires a different kind of leadership style'; not 'traditional'. Again, a relational approach to leadership was an emphasis in the ePrincipal eMentoring and PL programme.

4.3.6 Learning leadership - collaborative learning - learning organisations

Three LPs referred in some fashion to professional learning about educational leadership, done by either themselves and/or their ePrincipal, and all connected collaborative leadership to learning together in some way. All these very experienced LPs referred to still being learners personally, with a couple stating that while they might be the head teacher they really were the 'lead learner' (Gus and April). For Marcos, the relevance of collaboration to professional learning was 'only at about 99% importance'; it was Gus who pointed out that 'if we are going to be a learning culture ... you don't do it in isolation ... you piggy-back people's ideas'. Several spoke

of the shared learning journey; April spoke of her 'vision for ... teachers ... they're also learners ... we're on this together kind of thing'; Sandy stated that their school's staff meetings needed to be a 'safe place' as they were 'a learning time' for them. Learning as a group, rather than merely as individuals, was seen as crucial if school or cluster wide change was envisaged.

All clusters had projects that enabled teachers to connect face to face (f2f) or via VC to share strengths and learn together. Only a couple of the participants specifically referred to their principals learning together, but all were very positive about the 'wonderful dialogue' (Sandy) they had enjoyed. They all believed there was 'huge value to be had from the cluster ... hugely empowering to the school ... giving our teachers a sense of ... on-going professional learning', as Kurt put it. Sandy referred to 'verbalisi[ng] the importance of collaboration and the learning that can come out of it' to her staff, of being 'strong ... about the expectation to collaborate ... [being] clear ... about all the benefits ... to teachers ... kids ...the future'.

Some of the keys to effective collaboration that the participants mentioned included:

- listening, 'when you have people who are ready to listen to others' perspectives ... are probably well on the way to collaboration leading to professional learning' (Gus);
- use of online tools such as the Moodle Boardroom and Forum, within their OLE.
- all reiterated that collaborative leadership 'is the building of positive relationships in a cluster situation' (Sandy), so it's the same for teachers as for students, 'about ... giving them the environment and potential to learn' (Gus).
- Kurt highlighted the importance of diversity: 'I don't think professional learning occurs in isolation ... for professional learning to occur you need exposure to new ideas, new concepts, new ways of doing things, and you need the ability to discuss, um, reflect, participate and be a part of a group that's ... learning together ... creating professional learning'.

 The eMentors believed that, with the national ePrincipal PL MoE funded programme, they were 'building the capacity to ... be innovative and experiment with online learning' (Marcos), with most articulating that collaborative professional learning is 'on-going and its developmental' (Kurt).

For Gus, 'a learning culture ... is ... where it becomes just natural, you naturally want to share ideas, to carry on doing readings; that's the kind of thing [all leaders/managers] should be doing'. However, he was quite realistic about how far they had moved toward becoming a learning organisation, admitting that a 'learning culture is much harder to achieve. I can actually say that [my cluster] hasn't got there yet ... and [my] college hasn't got anywhere near it ... but you do see the odd group of people ... close to being ... a learning culture'. While collaborative learning was a key strategy, most were realistic about where they were on the journey to becoming a Learning Organisation.

4.4 Question Three

What can cluster leaders do to strengthen collaboration and increase the impact on teacher practices and student learning outcomes? How can leaders make transformation continuous and sustainable? How might the VLN continue to impact positively on the system as a whole?

With this question we seek to examine the participant's understandings around key practical actions that can be taken to increase teacher collaboration and pedagogical change, and the most effective impacts on student learning and achievement – in their own words. Also considered are challenges they identified, and any ideas about sustainable development.

4.4.1 Keys to effective and sustainable collaboration

4.4.1.1 System leadership

Firstly, all Lead Principals knew that their leadership was crucial: 'at the high level it is driven by the principals' (Kurt); but that this leadership was collaborative, facilitative and distributed, rather than perhaps 'charismatic', 'hierarchical' or 'traditional'. For all participants 'effective relationships' were the 'greatest single factor' (Marcos) for success, enabling 'challenging dialogue' leading to philosophical development, often pre-softened by 'a lot of private one on one talking ... particularly between me and the other principals' prior, as Gus put it. While decision making was consistently distributed to new leaders it remained crucially collaborative, sometimes clearly team-based: 'The ePrincipal ... ahm ... absolutely makes the most decisions, ahh, but then he works with, generally the LIG, which are via email or back to the ... principals meetings' (Marcos).

4.4.1.2 ePrincipal leadership

Another feature of their responses was their sense of drive and motivation which in many ways was a response to their ePrincipals, as much as being student-focussed. Marcos spoke of being 'captured' by the ePs' 'energy and initiative', their 'passion for e-learning', of them being 'the most [energising] group of people' ... 'they're always so positive'. All of the LPs expressed deep respect for the skills and commitment of their eP/F, of them being at the 'top of their game' (Marcos), well researched, and committed to a 'good big-picture vision' (Marcos), 'based on 21st Century learners' (Gus) for the nation. Sandy emphasised that 'when you have an ePrincipal [it's] that much easier', and Marcos' ePrincipal was elevated to cluster Chair but with very collaborative processes already in place.

4.4.1.3 Collaborative learning

The Lead Principals were very clear; all viewed collaborative learning as the most powerful action to generate pedagogical change: 'we ... see that much more effective learning takes place when you ... can devolve responsibility for learning' (Marcos), and emphasised collaboration which enabled 'the ability to discuss, um, reflect, participate and be a part of a group that's learning together ... creating professional learning' (Kurt). There was a

growing belief in the power of mentoring and coaching at the national level, which they believed was 'showing true collaboration', and was 'starting to have an effect' (Gus). As Marcos said, 'the e-learning initiative enables that very effectively' for teachers and students. Cluster-based collaboration was 'hugely empowering to the school' (Kurt) in supporting on-going professional learning.

LPs also detailed a range of actions that they commonly took to support teacher development and learning – showing that they took responsibility for resourcing and creating the conditions conducive to change within their own schools. Gus admitted that 'responding to teachers' expressed needs: 'that jolted me into action'. Kurt said he had to 'grin and bear' the demands of resourcing PL. Working with the early adopters was an important facet of principal leadership mentioned by several participants. For principals, 'absolute commitment' (Kurt) and participation in PL was crucial, as well as being seen to be the 'lead learner' (April). They supported collaborative PL programmes because they have the 'ability to touch the teacher directly', enabling them to 'feel the efficacy that they can change' (April). All believed in the power of collaborative professional learning.

4.4.1.4 Relationships and dialogue

Relationships, even friendship, were spoken of as absolutely critical for successful collaboration. As Kurt put it: 'collaborative leadership of the cluster comes down to the effectiveness of that relationship between the principals ... your interpersonal dynamics are important'. Sandy said: 'Collaborative leadership is about building positive relationships in a cluster situation ... building effective relationships'. Several participants detailed relationship-building strategies.

Most of the LPs described a range of dialogic and collaborative leadership processes, mostly in relation to their principal peers. For Sandy these included:

 Inclusion: 'we needed to hear from everybody'. 'I would ... just keep going around the table until we started getting some kind of agreement;

- Support: ensuring that, 'no-one's left out in the cold'; 'providing environments where you can have safe challenging talk'; 'for a start [in a meeting] there was a bit of off-loading', like to think that we wrapped a cocoon around the school ... having a rough time';
- Listening: 'listening to each other', 'I would go to the table expecting to give my point of view ... and to listen to what they had to say;
- Contact: 'regular and frequent contact', 'conversations';
- Focus: 'have situations where you get beyond just talking about systems and processes, where you're actually having challenging dialogue about learning';
- Consensus: 'getting some kind of agreement or consensus';
- Professional: 'even if those schools were in competition for students
 ... they could still work collaboratively';
- Challenge: 'ask them to rise above what they deal with in their schools every day ... and their sheer survival of their school';
- Benefits: 'I'd challenge them to think about um what their school and their community can get out of the cluster';
- Teamwork: 'It's not about me, it's about the group', 'air traffic control';
- Flexibility: 'you'll always have uneven commitment in a cluster, you
 always have different schools sitting on a different point on a
 continuum', 'it will always depend on the crests and troughs in the
 relationships of the cluster' ... 'low commitment means I need
 support and help, somewhere ... variability: you just ride with it, that's
 part of leadership';
- Dialogue: 'start having challenging dialogue' ... 'looked forward to ...
 some wonderful dialogue' ... 'know [that] we have moved along a
 continuum philosophically as a group, then that is a great
 achievement';
- Policy not management: 'the less they have to do after they leave the meeting the better', 'once we had an ePrincipal, he would have ongoing things that he would follow up on';
- Integration: 'help that [new] principal see what the benefit is',
 'importance of the place of the history and whakapapa of the cluster';

Identity: 'needed to be ... a sense of belonging, that the cluster was integral and fundamental to what each individual school was doing' ... also an empathy from people at all levels' ... 'feel that it was good to be ... in a [cluster] school';

Two of the other principals referred to using or developing 'friendship' as a key strategy, along with the common focus on dialogue and consensus decision-making. For Kurt, this enabled one to 'argue strongly' and to be 'pretty blunt', though he was glad that his principals were all male!

Speaking of a lead principal's 'moral authority' to lead, Kurt said: 'you cede a certain right to the leader of that group to make decisions or to speak on behalf of the body. As long as the leader of that group is accurately representing the needs and wants and wishes of that body, then they have the moral authority to lead ... and you can ask or discuss with someone to do, or to follow a particular line'. He concluded, however; 'of course it is very ephemeral'.

These Lead Principals completely understood that relationships were the key and led accordingly.

4.4.1.5 Summary of congruent features

Overall, there was a high degree of common understanding and practice of collaborative leadership by these Lead Principals. They were very articulate and effusive about their cluster and national structure and leadership, believing that the VLN and its clusters were making a very positive contribution to educational transformation in NZ.

4.4.2 Challenges to effectiveness and sustainability

4.4.2.1 Demands on Lead Principal time

The participants referred to a variety of challenges to managing collaborative clusters and teacher development. Some of the participants referred to the conflicting demands on their time; in school vs out of school. Some also expressed sympathy for the complexity of an ordinary principal's role (i.e. their colleagues'). Sandy pointed out the need for adjustments she made to her responsibilities and her internal management structure, with

the positives of providing new leadership opportunities for others. A range of responses included:

- Marcos: 'school principals, for them, e-learning was a very small part
 of their whole complex [job]' ... 'the school principal parked that
 responsibility' with their Lead Teacher/DP; 'I think that ... half of
 them, are struggling to come to terms with the job', as new principals;
- Sandy: 'We can't expect [a new principal] to go into a cluster cold operate effectively and immediately collaborate', ... 'importance of inducting new principals'... 'each cluster has its own whakapapa and kaupapa (history and 'the way things have been done')... a huge ask of ... especially a first time principal'; 'I had to shift some things off my plate, so I was increasing the cluster as a priority for me as a leader', which led to 'giving someone else a leadership opportunity really';
- April: She referred to complaints that had been voiced by her staff, that she was 'never there, door's shut, you're not accessible. [The] cost is taking time away from own school'; She also referred to the clashes and time constraints where other projects were running at the same time.

4.4.2.2 Change of principal and uneven commitment

Another challenge was the uneven commitment by Ps across the cluster; LPs need to be accepting of this, a facet of collaborative leadership according to Sandy. Also, the turnover of principals in cluster schools was a constant challenge, with the resultant need to acculturate new principal appointees, giving rise to a suggestion by Sandy that clusters need an induction process for them. Sandy and Marcos repeatedly referred to the need to help a new principal to appreciate a cluster's benefits, to understand its 'whakapapa and kaupapa' (Sandy), recognising that these are unique to each cluster. The high demands on first-time principals as they adapted to their new in-school roles was also recognised, but generally the Lead Principals accepted that it was their responsibility to build collegiality and effective collaboration no matter what, although Marcos suggested that 'I can see an opportunity for the ePrincipals'.

4.4.2.3 Challenge of pedagogical change

Other ideas about or challenges to pedagogical change noted:

- It is challenging work! April said, 'Better not swear here, but it's very hard';
- A multiplicity of other projects and opportunities demanding principal & teacher time:
- Teachers not seeing the need for change nor the power of e-learning;
- 'Older, middle managers that's, ah, the blockage' sometimes; although Sandy suggested that her ePrincipal could find ways around unsupportive managers to help teachers;
- Feeling as if their efforts were a drop in the bucket; that there was so much more they could do;
- The length of time required to generate change was also recognised;
 that there is no easy path to culture change or to becoming a Learning Organisation;

A couple of LPs referred to some strategies or projects that had failed to work, so there was clearly a risk whenever a new idea was implemented, there was no guarantee of success;

4.4.2.4 The cost of collaboration

The financial cost of collaboration was mentioned by several. ICTPD contracts ran for three years only, others were sometimes shorter; most clusters are now self-funded. Other comments related to:

Equitability: Marcos mentioned the relatively higher cost to very small schools;

Kurt criticised the MoE for the limited contestable nature of the PD funding because 'it's totally contrary to any form of professional learning [theory] ... [professional learning is] on-going'.

4.4.2.5 Hierarchical management style

April specifically mentioned the limitations of a 'directive' management style; that you cannot command teacher change:

• 'making everybody do stuff – adding it to what they already do. E.g. directive statements from the principal: "We are now going to be an e-learning school", etc'.

4.4.2.6 Inadequate in-school resourcing or quality

This was referred to somewhat obliquely by some of the participants. There were two aspects: quality of e-learning delivery, specifically some poor VC classes and/or eStudent support; and insufficient resourcing of collaborator time, usually an eTeacher or eSupervisor. Sometimes this was put down to a matter of interpretation of the policy agreed to in meetings.

A leader or role 'not given the right amount of non-contact time' by their school:

'that was up to each individual principal, we all agreed on the period of time they [eTeachers] had, but some were more successful than others', 'this is where the sovereignty of some schools swung in, because they did it in different ways that we perhaps different than I would do ... each school did it differently ... we were not going to dictate that, each school knew what they needed .. we left it at that'; 'you'd make broad policy ... the limits were what was actually happening underneath ...' (Gus);

- and April's words were: 'you think that you are getting somewhere, and then um, I realise that other people have a different interpretation about what's been decided'. These admissions may point to issues of communication, policy or commitment that will be considered more closely in the Discussion.

4.4.3 Summary

While there were few formally designed leadership policies or accountability

systems, all being local, voluntary, emergent and evolutionary, there were clear supporting personal beliefs and cluster practices as well as agreed national VLN practices that enabled – in the view of these participants - increased teacher collaboration and fostered a raft of new opportunities for student learning and achievement, and continued innovation.

For the participants generally, the key to continuous and sustainable development centred on a self-sustaining cluster and the power of collaboration. Gus' cluster had a specific vision and 'business plan' which designed sustainability through their shared OLE and the development of their 'Virtual Departments' – a 'Virtual School' – based on the belief that elearning not only motivates student learning but also enables greater efficiencies and effectiveness for teachers. Marcos' cluster had developed an extensive distributed leadership system which was enabling effective programmes as well as continued growth and innovation, although 'sustainability' was not specifically mentioned in his recorded responses. It was noted in the literature that 'sustainability' was a significant goal in their written funding proposals.

The national ePrincipal mentoring project was given the big tick by all its participants as they saw it as a key strategy to develop leadership styles and support the sustained growth and effectiveness of the whole VLN; an opportunity to 'get together and to work out ways of improving it ... nationally, but still retaining that regional flavour' (Marcos).

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This research is defined within the general context of educational improvement, focusing on the e-learning communities supported by the Virtual Learning Network (VLN) across New Zealand's autonomous schooling system. Internationally, there is widespread recognition of the need for systemic reform of education (Fullan, 2010). Various attempts to reform education systems have been implemented, including the paradigmatic level change of "self-management" in the 1980's, but this has been recognised as inadequate for some time (Caldwell, 2006a), as reviewed in Chapter Two. New Zealand's autonomous schooling system is well established, but a decade's experimentation with clustering of 'sovereign' schools (a term some research participants used) raises questions about the relationship and compatibility between these two paradigms. This will be addressed further later.

Within this growing movement of complex systemic paradigmatic change (Elmore, 2006), the VLN clusters aspire to grow innovative solutions to teacher and student learning needs, and the evidence above shows that major changes and improvements have been made in many of the VLN elearning clusters' schools (Pratt et al., 2011). They also aim to make a sustainable impact at the system level, as evidenced in some literature reviewed and in the data reviewed in section 4.2.7 above: by the ePrincipal PL programme, the national VLN-C Council and Trust, and more general contributions to thinking and practice through research, publications and conference presentations. They believe that they are at the 'cutting-edge' (Sandy), making a difference to student outcomes as well as influencing ICT integration and the development of 21st century learning across the system as a whole (Pullar & Brennan, 2008). Marcos saw it as 'where education is likely to be going in the future, you know, the anytime, anywhere anyplace scenario'; there was more than hope, rather a sense of inevitability of change, leaving the challenge of finding the path to the brighter future together.

Within this lofty 'vision for educational transformation' context acknowledged by the participants, this research asked the question:

What are the most appropriate and contextually effective models for leading and managing collaborative relationships and shared long-term projects for clusters of secondary schools?

Chapter Four recorded the data provided by cluster Lead Principals (LP) that directly addressed the research question about leadership practice in collaborative clusters. It especially focussed on the three sub-questions around collaboration (these could be seen as the What?, the How? and the Why?), with the key themes in mind, as identified in the literature review.

This chapter examines the data in comparison to the literature, sequenced by the 11 key themes identified by the literature review, as summarised in section 2.5. Both congruencies and challenges are considered, between the participants' thinking and practice and the dominant concepts in the international literature. There should be some useful learnings here in regard to the elusive goal of systemic transformation (Fullan, 2007; Hargreaves & Fink, 2006), as scoped in the literature review, since these and similar collaborative projects have been in existence for well over a decade in New Zealand and other countries, even though this research is small-scale and 'situated', 'interested', etc. (Feldman et al., 2004), affording only cautious conclusions to be drawn. This may lead to identification of some likely avenues of improvement to collaborative practice that may assist interested parties in making these VLN (or any similar) e-learning clusters more effective and more sustainable.

5.2 Principals' leadership

5.2.1 Visionary leadership - shared

The research participants were highly motivated and experienced secondary principals, as evidenced in Chapter Four, who initiated or led innovative cluster-based projects designed to improve learning for students through the use of technology and collaborative strategies. The longevity of many of the VLN clusters (Barbour, 2011), the continuous innovation and

the drive for sustainable systems all point to groups of experienced leaders, the participants and their various colleagues, who have New Zealand's youth and education system at heart, fully committed to making a difference (Powell & Barbour, 2011b). All participants clearly articulated their commitment to improving student learning and their commitment to collaboration. As Sandy put it, 'it was a shared vision that the principals had supporting the flourishing of our schools really, by working collaboratively'. Gus was more personal in declaring, 'I love being collaborative ... and I certainly get a big kick out of kids succeeding'. Ultimately, student learning and collaborative practice by staff were the driving factors, which the participants believed to be promoted by their clustering. Kurt put it this way: 'The students are the centre of our existence that everything we are doing should end up as a better experience for students.' Their student-centred visions were absolutely congruent with the literature (Caldwell, 2006a).

With that introduction, we now consider how the data compares with the literature-based themes following.

5.2.2 Learning leadership

All the Lead Principals considered themselves to be the 'lead learner' (April); their leadership focussed on pedagogical change assisted by e-learning tools, with a good grasp of change processes (Fullan, 2012). Most of Fullan's Six Secrets were well evidenced (Fullan, 2008a), but especially 'learning is the work'. Their focus on leading capacity-building through collaborative projects and collaborative teacher-learning strategies in particular, mirrored the literature's emphasis on leadership of learning (Copland & Knapp, 2006). Collaborative learning was everywhere, at all levels in the schools from the top to the bottom. These leaders spoke candidly of the challenge of growing supportive trusting relationships with their principals, working to build a group who learned together through 'challenging dialogue' which moved them all along a 'philosophical continuum' (Sandy). The collaborative/system leadership skills focussed on in the literature review (Collarbone & West-Burnham, 2008), were exemplified by Sandy's clarity around 'facilitating' dialogue, Kurt's focus on

'interpersonal dynamics' and Marcos' 'deference' to his ePrincipal/cluster Chair and Lead Implementation Group (LIG) team. The Lead Principals consistently applied their collaborative learning strategies inside their schools as well as across their clusters. There was evidence that cluster collaboration grew out of school-based practice, at least for these LPs (Munby, 2003). Gus talked about leading the learning for his teachers as well as his principal peers (Lambert, 2002); he was always talking about his vision for e-learning and the Virtual High School, one-on-one if necessary, to every member of the school's community, building the learning culture at every opportunity (Greenfield, 2004). The data also shows that there was leadership development designed for some students (the Tech Angels project: students facilitating teachers' technology development and support) as well as new lead learner roles for selected middle leaders in their Collaborative Faculty Groups (CFG). However, not all new leadership roles or people were effective; there was clear evidence of LP learning about that as well. More detail of some of these other learning leaders is addressed later under their own headings.

5.2.3 Collaborative, distributive approaches

While the importance of the role of the principal is underscored by the evidence above, which is consistent with the literature (Robinson et al., 2009), their practice of building and distributing leadership to others was completely congruent with the literature as well (Fullan, 2003). While their leadership styles and strategies (in school and cluster) were not based on formal policies, there was clear evidence of rejection of traditional, hierarchical, charismatic strategies in favour of interdependent (Elmore, 2006) collaborative ones; somewhere along in their leadership learning process they had made the paradigm shift (Eisner, 2004a). They were experienced principals who had a vision for student learning and the education system as a whole, with an uncommon commitment to supporting their ePrincipals' national leadership as well (Roberts, 2008).

However, some perceived weaknesses in their principal-peers' leadership (or management), was evidenced by: comments about variable commitment; suggested orientation for new principals; variable in-school

resourcing; non-attendance at meetings; ineffective VC teachers; and a preoccupation with 'nuts and bolts' of administration for some. Perhaps the biggest concern was the apparent inability to address the inadequate resourcing by some schools to shared programmes; 'variations to interpretation' of written policies are not deemed to be a sufficient rationale by this researcher, considering the strategic nature of these ventures. Ongoing issues of VC teacher quality or adequacy of VC student supervision (referred to by a couple of participants) significantly challenge the effectiveness of a collaborative programme (Liker & Meier, 2007). The data on these issues is addressed in more detail later, under Challenges; the point here is that not every experience of leadership distribution was positive.

5.3 Collaborative systems

5.3.1 Soft federations in a rigorously autonomous system

New Zealand's autonomous schools, with their rather limited support from central government for management of collaborative projects, have opted for voluntary 'soft' federations (collaborations) based on Memoranda of Understanding (agreements between schools) (Pullar, 2002), rather than the more significant 'hard' federations (with shared or singular Boards) (PricewaterhouseCoopers LLP, 2007). Based on a review of the data, it is clear that the VLN clusters are good examples of 'collaborations', as defined by the literature, although some clusters are considering new variants, as well as other international and local experts proposing national-level restructuring (Barbour & Wenmoth, 2013). There was plenty of scholarship behind (Powell & Barbour, 2011a) and flexibility in the various stimulus contracts the MoE offered, which strongly supported the rise of a variety of 'emergent' e-learning cluster innovations, which is said to be important for their effectiveness (Pettigrew & Fenton, 2000), as opposed to mandated new systems.

For Kurt, his conception of school 'sovereignty' explicitly precluded any sort of hard federation; his cluster's schools preferred a 'quango' model which he exemplified by referring to the Commonwealth. It appeared that his

understanding was either/or, collaboration or federation; there was no data indicating that any alternatives had been considered. The various other options in the literature, as referred to in Chapter Two, might well be considered in some detail, as these clusters mature and seek out greater sustainability. If structure is related to consistency, quality and sustainability, perhaps it is time that these voluntary collaborators take a serious look at Trusts or other forms of formalised cooperation (in the legal sense) as a way forward. Certainly there is evidence of this happening at the national level. The 'mahi tahi*' (Māori, here meaning: 'one voice') group's drive for the establishment of the national Trust fits here (Roberts, 2008), and some have since proposed an even more comprehensive national body (Barbour & Wenmoth, 2013) that is designed to attract government support. The interplay of autonomy and federalism (Standards DCSF, 2007) remains an issue to address by the New Zealand's education system. If the silence of the LPs on this issue is any indication, they were not expecting any change in government policy any time soon. One eP has proposed improvements for clusters and the VLN based on the explicit assumption that there will be no new funding for clusters (Roberts, 2010). However, if Kurt's and Gus's comments are understood correctly, it also seems that the popular perception of school 'sovereignty' may also limit the sense of accountability that the literature on collaboration points to (Copland & Boatright, 2004; Fullan, 2006). This aspect requires a closer look in a later section. Certainly these e-learning clusters were positive examples of maturing collaborations (Starkey & Stevens, 2007) with successful track records of innovation and improved student outcomes, as detailed above.

5.3.2 Multi-level collaboration

There was an abundance of evidence for collaboration at every level (Fullan, 2007), as demonstrated by the wide variety of shared cluster projects, in section 4.2.3 above. Although not formally investigated quantitatively, it seemed that the deeper the collaboration (perhaps as evidenced by more staff; more distributed leadership), the stronger the cluster and greater the continuing innovation. Marcos certainly made reference to a much wider variety of new leadership or management roles within his project than any of the other cluster leaders, but all but one cluster

had developed multiple collaborative projects at one time or another. Distributed leadership as promoted in the literature (Gronn, 2000), even if emergent rather than designed, was well evidenced (see sections 4.2.5, 4.3.5.3). There is evidence of collaboration with higher education (research on OtagoNet by Otago University), as well as some understanding of the role of learning organisations (Argyris & Schön, 1978), including a more recent initiative to develop and research the implementation of Communities of Practice (CoP) across OtagoNet and DunedinNet (Centre for Educational Leadership and Administration, 2012) by its leadership. Overall, the best evidence of collaborative systems was the clear practice of collaborative learning at all levels, in most clusters: Lead Principal-Lead Principal (twice principals-principal (termly meetings): ePrincipal-ePrincipal vearly): (monthly meetings); the national ePrincipal eMentoring (monthly); teacherteacher (CFGs - termly meetings); student-teacher (VC classes); online networks (e.g. list-serve, VLN), with some talk of student-student collaborative learning (in classes) as well. Gus referred to students supported to collaborate via VC toward learning goals, considering it to be a powerful learning mechanism. Within the EHSAS projects that three of the LPs referred to, some schools took responsibility for leadership for particular areas of development; perhaps another level of collaboration.

Not all collaborative structures or leadership worked well. Gus described their development of leadership expectations of their CFGs. 'We tried to spread it around ... each school would be the lead teacher in [a] particular faculty', ... that worked in some areas, but in others where you didn't get the commitment from the teacher [HoD] ... [they] certainly gave up pretty quickly'. They appeared to learn that 'volunteering' (Marcos) a person was not the same as building leadership; that the 'challenge of collaboration' (Gus) across schools required more thought and care to be consistently successful. Concerns about the financial cost of running these cluster-wide face-to-face collaborations were also raised; the cost of releasing staff for a whole day event (both relieving/substitute costs and travel costs) being quite a burden on schools. This again was consistent with the literature's recognition (above) of the cost of collaboration. Kurt in particular bemoaned the limited budget available to make the significant difference required.

The LPs all considered themselves lead learners (Lambert, 1998) and described a wide range of positive actions which supported their claim (sections 4.3.4, 4.3.6). These are compared to the literature in more detail under section 5.5. While the perceptions of others about their learning leadership were not within the scope of this investigation, the LPs did self-report on some responses from others. For example, Gus pointed out that staff said they missed his sharing of interesting learnings, after he had resigned his position.

The multiplicity of collaborative projects addressing a wide variety of learning needs as described in section 4.2.3, in most clusters, was also strong evidence of well-established collaborative practice; a wide range of teachers were involved at one time or another. However, there was only talk about supporting the learning of BoT members; a recognised need and aspiration. At senior management level (deputy principals) the only evidence of collaboration was that of the LIG managing Marcos' cluster; it was clearly lacking in the other four. The reasons for this difference may very well be very complex, and is likely to be a matter related to 'emergence' rather than design if the lack of other leadership policies is any guide. However, while it was beyond the scope of this study, it could be significant and may be worth further investigation.

Although the literature suggests that consistency is important for systemic change (Liker & Meier, 2007), the Lead Principals did note that there were some inconsistencies of collaboration by principals and schools across most clusters, tending to accept it as a continuing challenge. Sandy said: 'you just ride with it, that's part of [one's] leadership'. Few suggestions were made in the interviews about actively addressing these inconsistencies.

5.3.3 Collaborative leadership

Collaborative and team-based leadership (Huang, Wei, Bostrom, Lim, & Watson, 1998) were clearly indicated by Marcos in his descriptions of the decision-making roles and processes within his cluster, especially considering his statement that 'I don't think that there's ever been one person running the show, funnily enough', in reference to their ePrincipal's

promotion to cluster Chair. This clarifies somewhat the issue of status and authority; that increased status enabling greater collaboration did not equate to use of hierarchical command and control methods (Hargreaves & Fink, 2006). While the rest of the clusters represented in this study had raised their ePrincipal's salary to that of a rural DP as well, similar to the Lanyon Cluster in Australia (Caldwell, 2006a), their eP's actual status was variable and sometimes unclear. There was a definite sense of hierarchy retained over some cluster's ePs, especially considering Gus' quotation of his ePrincipal's understanding. This raises some concerns about the depth of collaboration in some clusters as the literature is very clear about hierarchical systems being incompatible with collaborative ones (Eisner, 2004a). This may indicate a fruitful area for further investigation or clarification.

Various teacher-leader teams existed in every cluster, with Marcos' LIG made up of deputy principals being the most significant; certainly the only reference by an LP to cluster involvement by DPs. At the other end of the scale and more typical, in Gus' cluster, where his eP had 'no contact' with the DPs, 'the principals make the decisions, but the consultation is with the [range of teacher-leader positions].' Mere consultation processes do not measure up to the requirements for collaborative leadership in the literature (Gill, 2008). While there clearly was collaborative decision-making horizontally between each cluster's principals, and some teacher-leader teams, it seems that there is a lot less evidence for vertical collaboration within some of the cluster's leaderships (Briggs, 2010). Perhaps one might say that there is distributive leadership without necessarily collaborative leadership in some clusters, though this might be reinterpreted as mere delegation (Gill, 2008).

An interesting area for consideration is the interplay of relationships and responsibility within these leadership structures; the different decision-making processes which the data point to for each cluster. While more investigation would be required to produce definitive descriptions of the different working arrangements, I have attempted to picture some of the variants below. Of course, collaborative communication lines are likely to

be quite dense and diverse (more like a fractal), but I have tried to consider decision-making responsibility connections alone.

Figure 6 seeks to represent Marcos' clusters' rather flattened structure where the eP was promoted to Chair of the principals group.

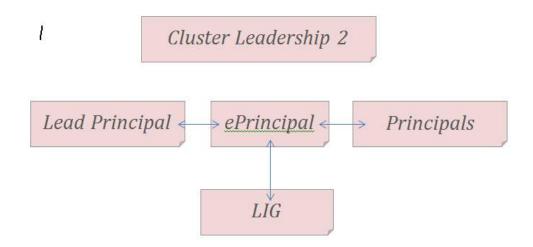


Figure 6 Cluster leadership 2

However, I suspect that they (certainly the LP and eP) might argue that Figure 7 would be more appropriate: a circle of connected responsibility where deep collaboration was continually shaping development decisions.

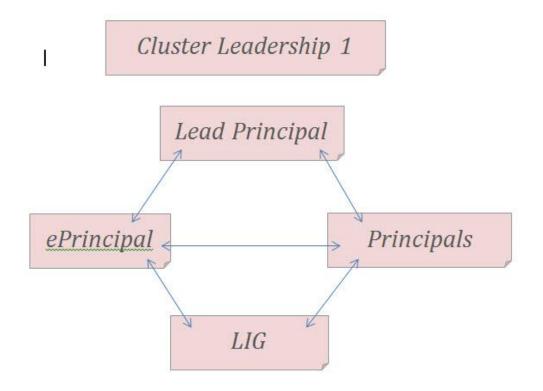


Figure 7 Cluster leadership 1

Figure 8 may represent the seemingly more vertical, perhaps hierarchical, alignment of the arrangement in Gus', April's and Kurt's clusters.

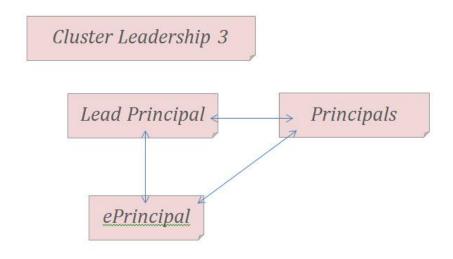


Figure 8 Cluster leadership 3

Or perhaps they were more hierarchical still (Figure 9)? This might easily fit with Gus' quotation of his eP's comment reported above.

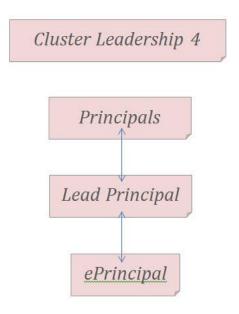


Figure 9 Cluster leadership 4

Considering that there was an inherent need for the ePs to collaborate directly with their various schools' principals, as also evidenced in the leadership development thrust of the national eP's eMentoring programme (Roberts, 2008), (and the comments by Sandy and Marcos above), it may be that they recognised the need for flatter cluster management structures, that there would be advantages of less reliance on the LP's as the clusters' projects matured and as LPs moved out of cluster leadership.

What these participants, and the ePs themselves, would think of these models would be a deeper and very informative future study. The extent of and reasons for this interplay between collaboration and hierarchy, and any more recent developments, would be worth further research as it may suggest further opportunities for more powerful collaboration, especially if the literature is correct in relating collaboration to the success and sustainability of these ventures (Woods, 2006).

5.4 Relational trust

All participants spoke of the pre-eminence of relationships and trust as the basis for successful collaborations, as recorded in section 4.4.1.4, completely aligning with the literature (Fancy, 2005). Several participants detailed multiple ways of supporting, building and facilitating collaborative relationships illustrating their skill at 'relational work' (Sterling, 2009), reported in section 4.4.1.1. This critical 'lateral capacity building' (Fullan, 2006) at the principal level at least, was the foundation that the LPs laid in order for the ePrincipals and others to build the collaborative projects. The relational trust that the various collaborative leaders developed was essential for the various expressions of system leadership (Collarbone & West-Burnham, 2008) across these clusters. It opened doors, enabled risktaking and unusual levels of commitment (Sergiovanni, 1990) to foster the new projects and innovations, to which most of the LPs attested. The ePrincipal professional development project, to which three of these LPs were committed, was designed to build the capability of the ePs to relate effectively to all their cluster's principals, in order to improve overall cluster effectiveness. Clearly, the LPs themselves had to work continually on this with their peers, especially the new principals in their cluster; Sandy and Marcos made special mention of the need for new-principal 'induction' in order to begin the process of relationship building. As Marcos said, in complete agreement with the literature (Fullan, 2008a), 'effective relationships' were the 'greatest single factor' for successful collaboration.

5.5 Learning leadership and capacity-building

There was clear evidence of Fullan's "network or cluster-based strategy" that can do "double duty" (2007, p. 56) amongst the variety of programmes implemented in these e-learning clusters designed to build capacity. While the opportunities were there in every cluster for teachers to meet or connect for collaborative professional development, where "learning is the work" (Fullan, 2008a, p. 77), thoroughly supported by the principals, it was not so clear about their overall effectiveness.

For the Lead Principals, the data showed three leadership practices supported in the literature review. Firstly, they consistently sought to foster collaborative teacher learning, modelling it themselves in a variety of ways (Stoll, Bolam, McMahon, Wallace, & Thomas, 2006). Secondly, their focus was on pedagogical change, toward learner-centred programmes broadly summarised under the '21st century learning' theme. The data was consistent with pedagogical leadership with an e-learning component. This is recognised as a powerful combination by writers such as Fullan (2012). Lastly, they aligned with the literature about growing leadership density where all teachers can be leaders of learning (Lambert, 1998), a key sustainability factor according to Munby (2003).

There is growing knowledge and interest in Marcos' cluster (Centre for Educational Leadership and Administration, 2012) in developing communities of practice (CoP) (DuFour et al., 2006) as a strategic teacher development process (Annan, 2006). The concept of a learning organisation (or organisational learning) was perhaps understood by these cluster leaders, but there was no evidence provided of any strategic implementation, and at least Gus' assessment of his cluster was: '[my cluster] hasn't got anywhere near it, ... [my college] hasn't got anywhere near it ... but you do see the odd group of people'. Perhaps the challenge is to grow that learning culture to ensure sustainability, as the literature clearly suggests (Jackson & Temperley, 2007)?

5.6 Shared vision and ownership

Section 4.5.1 details important statements by each of the research participants about the nature of their vision and how it was shared. These included inspiring goals such as: 'the grand goal of e-learning'; 'a complete swing in pedagogy across the board'; 'the way of the future'; and 'creating online learning communities'. This is completely congruent with the literature which always points to the foundation of a shared vision for people or groups to work together (Fullan & Ballew, 2001). Most of the LPs were instrumental in creating the cluster vision, and talked of how they worked with their peers to develop a truly 'cluster vision', not just a personal vision. The various cluster projects and developments indicated that the vision also

developed, as they learned together and as opportunities arose; again consistent with view that a shared vision may be an outcome of, as well as a pre-condition for, collaboration (Fullan, 2008b). The multiplicity of programmes and teachers involved also pointed to the growth and spread of the vision, again an indication that it was a moral or values-based conception of a better educational reality (and community reality for some), to which staff responded positively with more-than-normal commitment and acceptance of new leadership roles (Bryk & Schneider, 2002).

5.7 Dialogue

Dialogue is, according to the literature, a critically important tool in first building a shared vision and then defining the practicalities of the collaborative projects, even creating solutions to challenging problems (Senge, 2000). The Lead Principals were very clear about the dialogic processes they employed; most references to dialogue were in regard to working with their principal peers. Section 4.3.1 describes some of the consensus-creating tools these LPs used; they were very clear about their responsibility (Fullan, 2003) and the level of skill required facilitating collaborative decision-making processes. These system leadership level skills (Collarbone & West-Burnham, 2008) were also in evidence when they spoke of their national collaborative work.

While the clusters have survived and matured, and there was evidence of a variety of teacher groups in every cluster, it is not so clear that the "tight feedback loops" based on "continuous dialogue" (Pettigrew & Fenton, 2000, p. 55) are evidenced here. There were still references to some weak commitment and under-resourcing from some cluster partners. While self-determination and innovation were clearly evident in the data, this researcher could not be as positive as Annan (2007) was about the communities of practice that he investigated. Perhaps the depth of practice of dialogue, including by teachers, needs further consideration?

5.8 Teacher leadership and teams

Not only is there a drive to build collaborative learning for staff and blended learning for students (Pullar & Brennan, 2008), the practice of leadership in

the clusters, and in at least some schools, has also become more collaborative. Collaborative leadership has built relationships between leaders and also fostered new leaders (4.3.5.3), and is consistent with the literature reviewed (Woods, 2006). There is clear evidence above (section 4.3.5.3) that it has built leadership capacity and supported distributed leadership at multiple levels (Fullan, 2007), either as an intentional key to effectiveness or just to cope with the extra workload. While they all said that there were no leadership policies, relying instead on their personal leadership styles, they all recognised that distributed leadership had emerged as they addressed their development needs (Fullan, 2003).

Youngs (2007) outlined a variety of types of distributed leadership is his diagram (see Figure Three), including an emphasis on delegation of leadership or an emphasis on emergent leadership within community. Others include Youngs' separate 'shared leadership' conceptions within the distributed category (Harris, 2005a). The rather generic understanding of distributed leadership (DL) by the LPs probably means that they grouped these two (distributed and shared) together. Since they all admitted to having no formal policies on the matter, no design mechanisms, it appears that the various expressions of DL merely emerged in response to the demands of new collaborative projects. This may attest to their effectiveness as collaborative leaders, but it is somewhat surprising since the conception and debate around DL has existed in the literature for well over a decade (Gronn, 2000; Huang et al., 1998). Perhaps schools are still catching up with the wider fields of business and commerce in developing new leadership systems for development (Wenger & Snyder, 2000).

Some teacher-leaders tended to function as teams, others in shared ways, some as individuals; it may have depended their mostly part-time nature or on the particular project's needs and systems. The distinctive new role of the ePrincipal (as full-time CEO), with responsibility for a wide variety of programmes in some clusters, appeared to encompass all of these at different times (Youngs, 2007). The evidence in Chapter Four clearly aligns with the literature, from local to national to international studies, which strongly encourages development of distributed leadership systems and appropriate capacity-building supports (OECD, 2008; Schleicher, 2012).

While there were a variety of roles and statuses represented by these LP's ePrincipals, it would seem that a good 'average', or perhaps a recommended 'minimum', might be that of the 'Cluster DP' of the Lanyon Cluster in Australia (Caldwell, 2006a). According to the literature, the cluster facilitator was appointed DP in every cluster school. Some consistency of role and status may assist with access and effectiveness within schools as well as building sustainability, especially if systemic impact is envisaged (Barber & Fullan, 2005). The ePs in these clusters have now outlasted their LP bosses (all of whom have moved on), and are likely to be a more experienced collaborative leader than some newer cluster LPs, perhaps contributing more to cluster sustainability than any other leader (Hargreaves & Fink, 2006). Is it time for emergent new roles to become somewhat more formalised? Do collaborative leaders need a degree of status-recognition in order to function most effectively?

5.9 System leadership

There was a wide range of evidence of system leadership (Carter & Sharpe, 2006) provided by the LPs, mainly about themselves as expected. The data also pointed to a multiplicity of new system leadership (or perhaps management) roles for non-principals. Most new cluster-engendered roles (as referred to in 4.3.5.3, 5.8, etc.) had a school-to-school orientation; even the eLibrarian of Marcos' cluster was responsible to teachers and students outside their own school even if it was just to keep a website up to date. At the top end of the management scale, the data (4.4.1.1) shows that the Lead Principals were outstanding examples of system leaders (4.3.1.2), easily fitting many of the criteria and typologies supplied by writers such as Collarbone and West-Burnham (2008) and (National College for School Leadership (NCSL), 2007).

Perhaps another significant indicator of their system leadership was their penchant for promoting the leadership of others, especially evidenced in the support they clearly showed for the collection of ePrincipals nationally.

As mentioned above, not all experiences or initiatives around system leadership were productive. The CFG leaders were intended to be system leaders, overseeing the collaboration of their subject teachers. The

'volunteered' CFG leaders (from schools' HoDs) evidenced above, did not always work; there were lessons about leadership development there. Perhaps the collaborative leadership skills of the LPs and eP needed to be replicated in these middle-leaders before they were thrust into a system leadership role – again a need recognised by the literature above (Collarbone & West-Burnham, 2008). There was no evidence supplied of this occurring in these particular clusters; there were no structured leadership development programmes of any kind for teachers. However, it was implied that some HoDs did step up adequately to this new (in-cluster) systemic leadership role, suggesting that many teachers do take new afforded opportunities when thev are and supported appropriately(Department for Education and Skills (DfES), 2003).

5.9.1 The ePrincipals

The ePrincipals were the 'new kids on the block' whose title and roles were difficult to find examples of in the literature; only NZ-based practice uses the term in any Google search. Cluster leadership-focussed research tends to investigate the work of principals rather than these types of new teacherleaders. The data shows that it is an 'emergent' leadership role which is still very variable, debated (Gus), and often unknown within NZ's education system (Roberts, 2008). The LPs clearly relied on these teacher-leaders as their full-time CEOs, suggesting both systemic management and leadership roles (Carter & Sharpe, 2006). The LPs were most impressed with their initiative, innovativeness, thought leadership (McCrimmon, 2006) and leadership both at cluster and national levels (section 4.3.2, 4.4.1.2). Interestingly, no participant referred to the eP 'management' of the VC schools or network (Bolton, 2008), although the effective working VLN was quite evident, and has been well researched by others (Barbour, 2011; Powell & Barbour, 2011b; Pratt et al., 2011). More significant, however, was the much higher profile that the LPs gave to their ePs as system leaders (clearly shown above), than the literature typically gave to non-principal system leadership. There is only one sentence in Collarbone and West-Burnham (2008) about DP exercise of cross-school leadership. Three LPs spoke highly of the national capacity-building ePrincipal leadership eMentoring programme, with high expectations for their groups of ePs

growth in leadership; a programme which easily fits with the OECD's call for building leadership for the future (Schleicher, 2012). Importantly, there was no data which would support a concern about 'designer leadership' (Thrupp, 2005). In fact, the reference by Sandy about 'leadership targets' indicated personal ownership rather than prescription (Roberts, 2008), while the focus on relationship building skills was closely aligned with the literature (Carter & Sharpe, 2006).

Sandy's very perceptive comments about the 'special kind of leadership development' being focussed on in the eMentoring programme were very interesting. She compared the leadership development of the ePs to that of Gifted and Talented programmes designed for so called Gifted and Talented (GAT, in New Zealand literature) students (Gagne, 1991). It wasn't that the programmes were the same, or that she was merely recognising the same degree of potential for development, rather, the personality development issues were similar. The ePs, in her estimation, needed to develop their ability to relate, to form 'effective relationships' with their schools principals, just as GAT students often need to learn to relate to their peers. The LPs in this programme were very aware of the leadership development needs of their protégés and addressed this in a structured and comprehensive manner (Hartley & Hinksman, 2003), fully supported by the MoE at the time.

These ePs and LPs both showed a high degree of initiative and sense of responsibility (Technology Colleges Trust, 2000) to lead development of elearning, blended learning and online learning environments nationally (Powell & Barbour, 2011b; Pullar & Brennan, 2008), and tended to act in supportive and complementary ways toward their shared goals – again, entirely consistent with the literature (Hopkins, 2007). As the LPs said, the ePs deserve every support that they can get.

5.10 Social impact

The literature from a socially critical perspective tends to imply specific cultural intentions, perhaps even civil or political goals related to equity and equality (Foster, 1989). While these participants did not refer to cultural transformation aspirations, they did have visions for rural students having

equal opportunity (or better) than their urban counterparts, i.e. to improve their learning outcomes. Their concern for the survival (rather than emancipation!) of smaller rural communities was also referred to, as keeping students from going off to city boarding schools by providing a full range of subject options, helped maintain rural populations and viable schools, as noted in the data about their visions. Probably the biggest value-based goal (Bottery et al., 2012) was to develop a schooling system that truly prepares students for the challenges of the 21st century (Parliament, 2012), consistent with the MoE's aspirations for educational development (Ministry of Education, 2006). Collaboration tends toward greater expressions of democracy (Bennett, 2012). Certainly these LPs and ePs represented in this investigation expected their commitment to be respected and their voice to be heard (Parliament, 2012). They were not content with the educational status quo.

5.11 Moral leadership

Kurt was the only one who spoke of the 'moral authority' that a collaborative principal has and can use. However, all LPs spoke with a sense of moral vision, as the literature has defined (Fullan, 2003), which focussed on making a positive difference to the learning of students, rural communities (in particular), and of a transformed education system. These were personalised and high ideals which other teachers and leaders bought into with high levels of commitment and energy. The LPs were especially appreciative of the enthusiasm and commitment of their ePrincipals, and the ePs as a group, and keen to support them in any way they could (Roberts, 2008). There was clear evidence of the motivating power of a values-driven vision and initiative that contributed to its success and sustainability (Bottery et al., 2012).

5.12 Collaborative culture and accountability

The literature, as summarised in section 2.5.11 above, is especially positive about the in-built accountability features of collaborative systems, noting especially the shared nature of responsibility (Briggs, 2010), and the inherent balance that collaboration can bring (Fullan, 2006). However, while

there was a strong sense of a supportive collaborative culture, there were still aspects of collaborative practice that the LPs spoke of, which were of concern, perhaps even contributing to ineffectiveness at times. It appeared that there was a place for better accountability systems in order to build quality learning systems and more consistently improved student outcomes. Peer accountability, as supported by the literature (Caldwell, 2006a), would likely contribute significantly to effectiveness and more sustainable systems. There may be lessons here, in this area of silence, for cluster leaders and perhaps those who might support their continued sustainability.

5.13 Summary

Having discussed a large range of findings, this study moves to its conclusion, with a few closing thoughts about opportunities to improve effectiveness and sustainability for clusters and their leaders, and some areas for further investigation.

CONCLUSION

CHAPTER SIX

6.1 Introduction

The purpose of this chapter is to make concluding statements regarding the participants' understanding and practice of collaborative leadership in their e-learning clusters and national network, in the context of sustainable system-wide transformation. While it is not my intention to repeat any detail of the preceding chapters, I will present: a brief summary of findings; my recommendations to relevant parties; limitations of this study; and my thinking about areas for further research.

6.2 Collaborative support; collaborative accountability

The participant cluster Lead Principals provided ample data that offered a clear picture of the high level of collaborative leadership skills and strategies that they and others employed in the development of their cluster programmes. Their vision, drive and relational skills, combined with their ability to build leadership capacity and empower others similarly, are the keys to their current successes; all of which are consistent with the literature regarding the leadership and management of collaborative clusters and system leadership generally. They are great examples of collaborative leaders and programmes that continue to lead some key aspects of elearning/blended learning development across the New Zealand system as a whole.

There were, however, some collaborative practices that stood out for this researcher more than the literature had indicated. These included: the extent to which relationship-building was crucial to cluster development; the critical system leadership by non-principals, specifically the ePrincipals; and the significance these Lead Principals placed on the ePrincipal Leadership eMentoring project. While they clearly characterised themselves as Lead Learners and resourced development of collaborative PL/PD for their staff, they were also realistic in their evaluations of the limited movement of their school or cluster toward becoming a Learning Organisation (LO) or similar.

Conversely, there were some aspects of transformative collaboration in the literature which were not mirrored strongly, or at all, in the responses of these participants. It was somewhat disturbing to find that there were no formal written policies about collaborative leadership in any cluster. While they were clearly effective models themselves, this personal influence will not be sufficient to address changes such as: cluster growth; increased complexity; and changes in leadership, especially where the Lead Principal moves on. Often the continuity factor is the ePrincipal, of generally lower status and influence at the principal governance level. Formal published leadership policies and leadership development, especially for incoming new leaders, should build effectiveness and sustainability.

A larger omission, in the view of this researcher as informed by the literature, was the general lack of formal cluster-based accountability systems. There was evidence of no formal in-cluster staff or school appraisal, despite some Lead Principals pointing to 'interpretations' of agreed policy that led to weaker e-learning delivery or support from some schools and managers, as well as indications of variable eTeacher quality. These weaknesses led this researcher to re-consider what Fullan's (2008a, p. 11) 'not too loose/no too tight' mantra means in collaboration; that there would appear to be a place for cluster-based performance management, and/or better self-review or peer review by a collaborating school. Consistent quality is a key component of effectiveness for any type of programme.

It is also noted that the participants did identify some challenging areas of cluster management, but that they offered no solutions to these. This researcher's career, like those of the Lead Principals, has been within New Zealand's rigorously autonomous school system, so it has been surprising to consider that it may be the shared conceptualisation of 'sovereignty' (the word used by the Lead Principals) which appears to have limited the mutual accountability within clusters. The use of the word sovereignty seems to have the connotation of 'keep your nose out of my business,' or 'you can't tell me what I have to do' within NZ's school system. It seems that there needs to be a development in the conceptualisation of the legislated 'autonomy' in our schools, toward at least voluntary acceptance of mutual accountability within collaborations. If mutual accountability can promote

cluster-wide consistency this will contribute significantly to the effectiveness and sustainability of the VLN clusters.

Also, a greater role for New Zealand's MoE in supporting the extra cost of collaborative management was alluded to by most of the participants; a concept clearly supported in the literature. While voting more operational funding for our autonomous schools seems unlikely, perhaps the MoE could see the strategic advantage of funding targeted to le.g.al collaborative entities which promote better mutual accountability processes aligned with the current government's increased expectations around performance management.

6.3 Researcher recommendations

This researcher's key recommendations are, that:

- Lead Principals, boards of principals and other clusters leaders:
 - Are encouraged to consider and clearly define their collaborative processes and leadership expectations, at each level in their organisation;
 - A new principal/leader induction process or guidelines would be a relatively simple additional outcome;
 - Continue to lead learning and to work toward their cluster and schools becoming a Learning Organisation or Community of Practice:
- The national VLN-C Trust (and/or other le.g.al collaborative entities):
 - Promote a more balanced conception of collaboration that includes more formal accountability and appraisal processes within clusters, run in parallel with school's own systems;
 - Develop and model mutual accountability systems which member schools may use to self-review or peer review toward improved quality and outcomes;
 - Seek MoE funding support for a share of collaborative management costs based upon these model collaborative accountability processes;

The MoE:

- Issues a request for proposal (RFP) to legally defined VLN entities offering partial funding support for cluster management based upon detailed proposals for increased collaborative accountability focussed on improving self and peer review capability within clusters;
- Recognises the distinct role of an ePrincipal in collaborative e-learning clusters (as a typical CEO answerable to a Board), as regional e-learning coordinators, to raise the status of these clusters as important transformers on the system as a whole. If funding was directed through the VLN-C Trust the Council or similar body, it would become responsible for administration, standards setting and perhaps cluster appraisal.
- Supports a cluster or regional leadership development support strategy to ensure that cluster leaders develop shared understandings of collaborative leadership.

6.4 Limitations of the study

This was a limited and focussed study on the leadership of collaborative e-learning clusters based on the perceptions of five experienced Lead Principals, using semi-structured interviews as the main data gathering tool. Clearly a wider pool of participants and a more extensive study would have helped clarify a wider range of collaborative practice and enable deeper analysis of the effectiveness or otherwise of that practice. Being a 'snapshot in time' limits the understanding of development or disintegration trends across this network of clusters, and the evaluation of their overall impact on the system to date. Small scale qualitative research only allows for tentative extrapolation of any themes developed. The level of co-construction of new knowledge can easily raise more questions than it answers.

However, in focussing on the smaller number of experienced cluster Lead Principals one is still able to identify a good range of common positive practice as well as to isolate some key areas of challenge in common. I believe that this limited investigation was able to produce interested

knowledge that may be of assistance to those for whom cluster sustainability is important, as long as they keep in mind the need for more research at scale.

I believe that the semi-structured interview format was ideal for this study; structured enough that the researcher could direct the flow and content coverage, but flexible enough that each participant could speak from their own perspective and experience. A rich and interesting set of data ensued, located in the distinctive experience of these not so common Lead Principals.

6.6 Areas for further research

Aspects of collaborative leadership that should be considered for further research are related to: the ePrincipals; leadership perceptions vertically within collaborations; penetration of collaboration; challenges to building a Learning Organisation across a collaborative; and the relationship of school autonomy to collaborative systems. More specifically:

- Considering the centrality of the ePrincipals in the responses of these Lead Principals, what roles and status should be awarded to the ePrincipal position to maximise their impact on cluster effectiveness and sustainability?
- If the motivational power of collaborative leadership is the secret to successful improvement projects, what are the perceptions of collaborative and distributive leadership vertically within such projects?
 - Where do the different members of a leadership team within a cluster place the leadership practice of the Lead Principal/Principals' Group/ePrincipal on a collaborative to distributive to hierarchical scale?
 - Investigate the degree of penetration of collaboration into a cluster(s) through the use of Woods et al.'s (2006) rubric?
- Where e-learning clusters have consciously attempted to build a Learning Community, Learning Organisation or Community of Practice, what are their key success factors and their continuing challenges? Is the challenge for a cluster different than for a school?

• Is New Zealand's conception and practice of school autonomy and school-based funding a hindrance or help to effective collaborative practice? Does the Ministry of Education need to develop a national collaboration/cluster-based strategy that includes a management support model to ensure that these transformative collaborative projects are sustainable?

Effective interdependence is an important component of sustained systemic transformation, as noted by former Secretary of Education, Howard Fancy, in his reflections on schooling reform for New Zealand:

Experiences since 1989 have provided deeper insights into the nature of the focus, capabilities, attitudes, supports, information and relationships that are required within a system, if it is to perform very well and on a sustainable basis (that is, achieve transformation). We have learned that schools cannot be 'isolated islands' in themselves, but need to be seen as archipelagos, with a mix of both independence and interdependence (2005, p. 16, 17).

Some recent reports and recommendations address the formation of an over-arching national collaborative organisation alongside support for regional coordination, perhaps encompassing all types of existing collaborative clusters. It is time that New Zealand's education system leaders move on from 'Tomorrow's Schools' now more than two decades old, and catch up with the international literature. "Leadership is located in the organisational spaces ... between schools ... and larger spaces across networks" (Harris, 2005a, p. 11) clearly indicates a new type of structure that must be addressed. It is time that the government finds a way to support the leadership and management of these strategic archipelagos of interdependence and an appropriate national body. The sustained transformation of our whole education system depends on it.

REFERENCES

- Alboher, M. (2008, September 24). A new generation, poised to reinvent: an interview with P Martin Interview. *New York Times*. Retrieved from http:\\nytimes.com
- Annan, B. (2007). A theory for schooling improvement; consistency and connectivity to improve instructional practice (Unpublished doctoral dissertation). University of Auckland, Auckland, New Zealand.
- Annan, J. (2005). *Professional supervision in a community of practice* (Unpublished doctoral dissertation). Massey University, Palmerston North, New Zealand.
- Annan, J. (2006). Communities of practice. [PowerPoint].
- Argyris, C., & Schön, D. (1978). Organizational learning: A theory of action perspective. New York, NY: Addison-Wesley.
- Arnold, R. (2006). Schools in collaboration: Federations, collegiates and partnerships (EMIE report No. 86). Slough, England: EMIE at NFER
- Barber, M. (2002, April). From good to great: Large-scale reform in England. Paper presented at the Futures of Education conference, Universatat Zurich, Zurich, Switzerland
- Barber, M., & Fullan, M. (2005, March 2). Tri-level development: It's the system. *Education Week*, 24(25), 32-35.
- Barber, M., Whelan, F., & Clark, M. (2010). Capturing the leadership premium: how the world's top school systems are building leadership capacity for the future. London, UK: McKinsey and Co
- Barbour, M. K. (2011). *Primary and secondary e-learning: Examining the process of achieving maturity*. Christchurch, New Zealand: Distance Education Association of New Zealand. Retrieved from http://www.vln.school.nz/mod/file/download. php?file_guid=114023
- Barbour, M. K., & Wenmoth, D. (2013). Virtual learning as an impetous for educational change: Charting a way forward for learning in New Zealand Christchurch, New Zealand: CORE Education
- Barnes, I., Coleman, A., Creasy, J., & Pearson, F. (2005). *New models of headship: Secondary or special school executive heads*. Nottingham, UK: NCSL.
- Bassey, M. (1999). *Case study research in educational settings*. Buckingham, UK: Open University.
- Bate, P., Bevan, H., & Robert, G. (2005). *Towards a million change agents: A review of the social movements literature*. London, UK: National Health System.
- Bechard, R., Goldsmith, M., & Fesselbein, F. (1996). *The leader of the future*. San Francisco, CA: Jossey-Bass.
- Beck, R. N. (1979). Handbook in social philosophy. New York, NY: Macmillan.
- Bennett, J. V. (2012). "Democratic" collaboration for school turnaround in Southern Arizona. *International Journal of Educational Management*, 26(5), 442-451.
- Bereiter, C. (2002). *Education and mind in the knowledge age*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Berman, P., & McLaughlin, W. (1977). Federal programs supporting educational change, volume VII: Factors affecting implementation and continuation (R-1589/7-HEW). The Rand Corporation

- Berwick, D. (2003). Improvement, trust, and the healthcare workforce. *Quality* and Safety in Health Care, 12(1), i2-i6.
- Bloor, M., & Wood, F. (2006). *Keywords in qualitative methods: a vocabulary of research concepts*. London, UK: SAGE.
- Bogdan, R., G, & Biklen, S. K. (1992). *Qualitative research for education* (2nd ed.). Boston, MA: Allyn & Bacon.
- Bohm, D. (1990). On Dialogue. David Bohm Seminars
- Bohm, D. (1996). On dialogue. New York, NY: Routledge.
- Bolstad, R., & Gilbert, J. (2012). Supporting future-oriented learning and teaching a New Zealand perspective. Wellington: New Zealand: New Zealand Council for Educational Research
- Bolton, C. (2008). The Virtual Learning Network in New Zealand. *Biennial Conference of the Distance Education Association of New Zealand*. Wellington, New Zealand: DEANZ.
- Bottery, M., Wright, N., & James, S. (2012). Personality, moral purpose, and the leadership of an education for sustainable development. *International Journal of Primary, Elementary and Early Years Education*, 40(3), 227-241.
- Brewer, J. (2006). Foundations of multimthod research: Synthesing styles. London, UK: SAGE.
- Briggs, A. R. (2010). Leading educational partnerships: new models for leadership? In T. Bush, L. Bell & D. Middlewood (Eds.), *The Principles of Educational Leadership & Management* (2nd ed., pp. 236-254). Los Angeles, CA: Sage.
- Brokensha, D., Warren, D., & Werner, O. (1980). *Indigenous knowledge systems and development*. Lanham, MD: University Press of America.
- Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage Foundation.
- Burns. (1978). Leadership. New York, NY: Harper & Row.
- Burns, R., B. (2000). Introduction to research methods. London, UK: SAGE.
- Burrell, G., & Morgan, G. (1979). Two diemensions: four paradigms. *Sociological Paradigms and Analysis*, 21-25.
- Bush, T. (2008). From management to leadership: Semantic or meaningful change? *Educational Management Administration & Leadership*, 36(2), 271–288.
- Bush, T. (2012). Authenticity in research: reliability, validity and triangulation. In A. Briggs, M. Morrison & M. Coleman (Eds.), *Research Methods in Educational Leadership and Management*. London, UK: SAGE.
- Busher, H., & James, N. (2012). The ethical framework of research practice. In A. Briggs, M. Coleman & M. Morrison (Eds.), *Research methods in educational leadership and management* (3rd ed., pp. 90-104). London, UK: SAGE.
- Caldwell, B., & Harris, J. (2008). *Breakthrough in governance*. London, UK: SSAT.
- Caldwell, B., & Spinks, J. (1986). *Policy formation and resource allocation*. Melbourne, Vic., Australia: Deakin University.
- Caldwell, B., & Spinks, J. (2008). Raising the stakes: From improvement to transformation in the reform of schools. London, UK: Routledge.
- Caldwell, B. J. (2006a). *The new enterprise logic of schools*. London, UK: Specialist Schools and Academies Trust.
- Caldwell, B. J. (2006b). *Re-imagining educational leadership*. Melbourne, Vic., Australia: ACER.

- Cannell, C. F., & Kahn, R. L. (1968). Interviewing. In G. Lindsay & A. Aronson (Eds.), *The handbook of social psychology: Research methods* (Vol. 2, pp. 526-595). New York, NY: Addison Wesley.
- Carr-Chellman, A. A. (2004). *Global perspectives on e-learning: Rhetoric and reality* London, UK: SAGE.
- Carter, K., & Sharpe, T. (2006). School leaders leading the system: System leadership in practice. Nottingham, UK: NCSL.
- Centre for Educational Leadership and Administration. (2012). *Leading and developing communities of practice among Otago secondary and area schools*. Dunedin, New Zealand: University of Otago. Retrieved from https://docs.google.com/file/d/1ix9ofl91dnairs5-mb1rrkymmgzgc4peuvgwerv5rzveioxjjhijfrnuudiy/edit?pli=1
- Chapman, C., Lindsay, G., Muijs, D., Harris, A., Arweck, E., & Goodall, J. (2010). Governance, leadership, and management in federations of schools. *School Effectiveness and School Improvement*, 21(1), 53-74.
- Clark, H. H., & Brennan, S. E. (1991). Grounding in communication. In L. B. Resnick, J. Levine & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 127–149). Washington, DC: APA.
- Cohen, L., & Manion, L. (1994). *Research methods in education*. London, NY: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). London: UK: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2003). *Research methods in education* (5ed.). London, UK: Routledge-Falmer.
- Collarbone, P., & West-Burnham, J. (2008). *Understanding system leadership*. New York, NY: Continuum.
- Collins, H. (2010). Creative research. Lausanne: Switzerland: AVA.
- Copland, M., & Boatright, E. (2004). Leading small: Eight lessons for leaders in transforming large comprehensive high schools. *Phi Delta Kappan*, 85(10), 762-770.
- Copland, M., & Knapp, M. (2006). *Connecting leadership with learning*. Alexandria, VA: ASCD.
- Creighton, T. (2005). Leading from below the surface: A non-traditional approach to school leadership. Thousand Oaks, CA: Corwin Press.
- Creswell, J. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: SAGE.
- Cuban, L. (1988). *Managerial imperative and the practice of leadership in schools*. Albany, NY: State University of New York Press.
- Day, C., & Harris, A. (2001). *Effective school leadership*. Retrieved from http://www.ncsl.org.uk/mediastore/image2/kpool-evidence-day.pdf
- Delamont, S. (1992). Fieldwork in Educational Settings. Methods, pitfalls and perspectives. London: Falmer.
- Demos. (2007). The collaborative state: How working together can transform public services. London, UK: Author
- Denzin, N., & Lincoln, Y. (Eds.). (2005). *Handbook of qualitative research* (5th ed.). Thousand Oaks, CA: Sage.
- Department for Education and Skills, & Qualifications and Curriculum Authority. (1999). *The National Curriculum handbook for secondary teachers in England*. London, UK: HMSO.
- Department for Education and Skills (DfES). (2003). *Collaboration: Learning partnerships and stakeholders, a guide*. London, UK: HMSO.

- Department for Education and Skills Innovation Unit. (2008). Federations continuum. Retrieved from http://www.standards.dfes.gov.uk/federations/software/ContinuumAugust07.doc?version=1
- Deutschman, A. (2005). Change or die. Fast Company, 96, 44-51.
- Dexter, S. (2011). School technology leadership: Artifacts in a system of practice. Journal of School Leadership & Management, 21, 166-189.
- Dimmock, C., & Lam, M. (2012). Grounded theory research. In A. Briggs, M. Coleman & M. Morrison (Eds.), *Research methods in Educational Leadership and Management*. London, UK: SAGE.
- Drucker, P. F. (1993). Managing in turbulent times: Routledge.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook for professional learning communities that work*. Bloomington, IN: Solution Tree.
- Duignan, P. (1987). *Reflective management: The key to quality leadership*. Australia: Centre for Administrative and Higher Education Studies.
- Duncan, S. (1974). On the structure of speaker-auditor interaction during speaking turns. *Language in Society*, 2, 161–180.
- Eisenhart, M. A., & Howe, K. R. (1992). Validity in educational research. In M. D. LeCompte, W. L. Millroy & J. Preissle (Eds.), *The handbook of qualitative studies in education* (pp. 463-480). New York, NY: Academic Press.
- Eisner, E. (2004a, December). Preparing for today and tomorrow. *Educational Leadership*, 61(4), 6-10.
- Eisner, E. (2004b). Transforming today for tomorrow. Nottingham, UK: iNet.
- Elmore, R. (2002). Beyond instructional leadership: Hard questions about practice. *Educational Leadership*, *59*(8), 22-25.
- Elmore, R. F. (1995). Structural reform and educational practice. *Educational researcher*, 24(9), 23-26.
- Elmore, R. F. (2000). *Building a new structure for school leadership*. Washington, DC: Albert Shanker Institute.
- Elmore, R. F. (2006). School reform from the inside out: Policy, practice and performance. Cambridge, MA: Harvard Education Press.
- Evans, T., & Jakupec, V. (1996). Research ethics in open and distance education: Context, principles and issues. *Distance Education*, 17(1), 72-94.
- Fancy, H. (2005). Schooling reform: Reflections on New Zealand experience (IARTV Seminar Series, No. 14). Melbourne, Vic, Australia: Incorporated Association of Registered Teachers of Victoria (IARTV)
- Feldman, M. S., Skoldberg, K., Brown, R., & Horner, D. (2004). Making sense of stories: A rhetorical approach to narrative analysis. *Journal of Public Administration Research and Theory*, *14*(2), 147-170.
- Fink, E., & Resnick, L. (2001). Developing principals as instructional leaders. *Phi Delta Kappan*, 82, 598-606.
- Fitzgerald, T. (2012). Documents and documentary analysis. In A. Briggs, M. Coleman & M. Morrison (Eds.), *Research methods in educational leadership and management* (pp. 296-308). London, UK: SAGE.
- Flick, U. (Ed.). (1998). *Psychology of the social*. Cambridge, MA: Cambridge University.
- Fontana, A., & Frey, J. H. (2005). The interview: From neutral stance to political involvement. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 695-727). Thousand Oaks, CA: SAGE.

- Foster, W. (1989). Towards a critical practice of leadership. In J. Smyth (Ed.), *Critical perspectives on educational leadership* (pp. 39-62). London, UK: The Falmer Press.
- Freire, P. (2007). Pedagogy of the oppressed. New York, NY: Continuum.
- Friedman, T. (2006). The world is flat: The globalized world in the twenty-first century. London, UK: Penguin.
- Fullan, M. (2003). *The moral imperative of school leadership* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2005). Leadership & sustainability: System thinkers in action: Corwin Press.
- Fullan, M. (2005). *Leadership and sustainability: System thinkers in action* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Fullan, M. (2006). Turnaround leadership. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2007). *The new meaning of educational change*. New York, NY: Teachers College Press.
- Fullan, M. (2008a). The six secrets of change: What the best leaders do to help their organizations survive and thrive. San Francisco, CA: Jossey-Bass.
- Fullan, M. (2008b). What's worth fighting for in headship? New York, NY: McGraw-Hill International.
- Fullan, M. (2010). *All systems go: The change imperative for whole system reform.* Thousand Oaks, CA: Sage.
- Fullan, M. (2012). Stratosphere: Integrating technology, pedagogy, and change knowledge. New York, NY: Pearson.
- Fullan, M., & Ballew, A. C. (2001). *Leading in a culture of change* (Vol. 1). San Francisco, CA: Jossey-Bass.
- Fullan, M., Cuttress, C., & Kilcher, A. (2005). Eight forces for leaders of change. *JSD*, 26(4), 54-64.
- Gagne, F. (1991). Toward a differentiated model of giftedness and talent. In N. Colangelo & G. A. Davis (Eds.), *Handbook of gifted education* (pp. 65-80). Boston, MA: Allyn and Bacon.
- Gawande, A. (2007). Better. London, UK: Picador.
- Geertz, C. (1973). Thick description: Towards an interpretive theory of culture. In C. Geertz (Ed.), *The interpretation of cultures* (pp. 213-232). New York, NY: Basic Books.
- Gewirtz, S., Ball, S., & Bowe, R. (1995). *Markets, choice and equity in education*. Buckingham, UK: Open University Press.
- Gilbert, J. (2005). Catching the knowledge wave? The knowledge society and the future of education. Wellington, New Zealand: NZCER Press.
- Gill, J. (2008, May 22). Distributed leadership model gives 'illusion' of consultation. *Times Higher Education*, p. 1. Retrieved from http:\\timeshighereducation.co.uk\401985.article
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Hawthorne, NY: Aldine Publishing Company.
- Glatter, R. (2003). Leadership and leadership development in education. In J. Storey (Ed.), *Leadership in organizations: Current issues and key trends* (pp. 206-225). London, UK: Routledge.
- Glatter, R. (2003x). Governance and innovation. In B. Davies & J. West-Burnham (Eds.), *Handbook of educational leadership and management* (pp. 229-237). London, UK: Pearson Longman.
- Glatter, R. (2007, November, 2-3). Schools and school systems facing complexity: Organisational challenges. Paper presented at the Conference of the Presidency of the European Union, Lisbon (Pre-publication draft).

- Goddard, J. (Ed.). (2003). *Leadership in the (post)modern era*. London, UK: Sage.
- Grace, G. (1990). The New Zealand Treasury and the commodification of education. In S. Middleton, J. Codd & A. Jones (Eds.), *New Zealand education policy today* (pp. 27-39). Wellington, New Zealand: Allen & Unwin.
- Graham, C. (2006). Blended learning systems. Definitions, current trends and future directions. In C. Bonk & C. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs*. San Francisco, CA: John Wiley and Sons.
- Greenfield, W. (2004). Moral leadership in schools. *Journal of Educational Administration*, 42(2), 174-196.
- Greenfield, W. D. (1999. *Moral leadership in schools: Fact or fancy?* Paper presented at the Annual Meeting of the American Educational Research Association, Montreal, Canada
- Grogan, M., & Simmons, J. (2012). The role of culture in interpreting and conducting research. In A. Briggs, M. Colemen & M. Morrison (Eds.), *Research methods in educational leadership and management* (3rd ed.). London, UK: SAGE.
- Grolund, N. E. (1981). *Measurement and evaluation in teaching* (4th ed.). New York, NY: Macmillan.
- Gronn, P. (2000). Distributed properties: A new architecture for leadership. *Educational Management and Administration*, 28(3), 317-338.
- Guba, E., & Lincoln, Y. (1988). Do inquiry paradigms imply inquiry methodologies? In D. M. Fettermann (Ed.), *Qualitative approaches to evaluation in education* (pp. 89-115). New York, NY: Praeger.
- Guba, E. C., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research*. Thousand Oaks, CA: SAGE.
- Guillemin, M., & Gillam, L. (2004). Ethics, reflexivity, and "ethically important moments" in research. *Qualitative Inquiry*, 10(2), 261-280.
- Gunter, H. (2001). *Leaders and leadership in education*. London, UK: Paul Chapman Publishing.
- Habermas, J. (1972). *Knowledge and human interests* (J. Shapiro, Trans.). London, UK: Heinemann.
- Hallinger, P., & Heck, R. (1996). Reassessing the principal's role in school effectiveness: A review of empirical research 1980-1995. *Educational Administration Quarterly*, 32(1), 5-44.
- Ham, V., & Wenmoth, D. (2010). e-Learnings: Implementing a national strategy project for ICT in education, 1998-2010. Christchurch, New Zealand: CORE Education
- Hammersley, M., & Atkinson, P. (1995). *Ethnography: Principles in practice* (2nd ed.). London, UK: Routledge.
- Handy, C. (1989). *The age of unreason*. Boston, MA: Harvard Business School Press.
- Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.
- Hargreaves, D. (2003). Education epidemic: Transforming secondary schools through innovation networks. London, UK: Demos.
- Hargreaves, D. (2010). Creafing a self-improving school system. Nottingham, UK: NCSL

- Harris. (2013). The MetLife survey of the American teacher: Challenges for school leadership. New York, NY: MetLife Foundation
- Harris, A. (2005a). Crossing boundaries and breaking barriers: Distributing leadership in schools. London, UK: SSAT.
- Harris, A. (2005b). Leading or misleading: Distributed leadership and school improvement. *Journal of Curriculum Studies*, *37*(3), 255-267.
- Harris, A. (2012). Leading system wide improvement. *International Journal of Leadership in Education*, 15(3)
- Harris, A., & Day, C. (2003). From singular to plural? Challenging the orthodoxy of school leadership. In N. Bennett & L. Anderson (Eds.), *Rethinking educational leadership* (pp. 89-99). London, UK: Sage.
- Hartley, J., & Hinksman, B. (2003). *Leadership development: A systematic review of the literature*. Coventry, UK: NHS Leadership Centre.
- Harvey, D. (2004). *Practitioner guide: An introduction to school federations*. London, UK: Department for Education and Skills, Innovation Unit.
- Hay Group. (2004). *The five pillars of distributed leadership in schools*. Nottingham, UK: NCSL
- Helen, J. C. (2003). *Writing research: Transforming data into text*. Hamilton, UK: Churchill Livingstone.
- Helsby, G. (1999). *Changing teachers' work*. Buckingham, UK: Open University Press.
- Hess, F. M., & Meeks, O. M. (2010). Unbundling schools. *Phi Delta Kappan*, 92(3), 41-42.
- Hill, J. E., & Kerber, A. (1967). *Models, methods and analytical procedures in educational research*. Detroit, IL: Wayne State University Press.
- Hitt, M. A., Keats, B. W., & DeMarie, S. (1998). Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century. *Academy of Management Executive*, 12(4), 22-42.
- Hopkins, D. (2006). *Every school a great school*. London, UK: Specialist Schools and Academies Trust.
- Hopkins, D. (2007, August). *System leadership roles and system reform*. Paper presented at the 4th iNet International Conference on Transforming Leadership in a Globalised World, Beijing
- Horner, M. (2004). A review of a supervised practice programme for overseas nurses. *Nursing Times*, 100(27), 38-41.
- Hoyle, R. H., Harris, M. J., & Judd, C. M. (2002). Research methods in social relations. NY: Wadsworth.
- Huang, W., Wei, K. K., Bostrom, B., Lim, L. H., & Watson, R. T. (1998). Supporting distributed team-building using GSS: a dialogue theory-based framework *Proceedings of the Thirty-First Hawaii International Conference on System Sciences* (pp. 98-107 vol.101):
- Innovation Unit NCSL & DEMOS. (2007). System leadership and governance: Leadership beyond institutional boundaries. Nottingham, UK: NCSL.
- Jackson, D., & Temperley, J. (2007). From professional learning community to networked learning community. In L. Stoll & K. S. Louis (Eds.), *Professional learning communities: Divergence, depth and dilemmas* (pp. 45-62). Maidenhead, UK: McGraw-Hill.
- Jenkins, H. (2009). Confronting the challenges of participatory culture: Media education for the 21st century. Cambridge, MA: The MIT Press.
- Kelly, P. M., Granich, S. L. V., & Secrett, C. M. (1994). *Global warming: Responding to an uncertain future*. Asia Pacific J. Environ. Develop

- Kent, T. W. (2005). Leading and managing: It takes two to tango. In E. Rausch (Ed.), *Leadership debate* (pp. 1010-1018). Bradford, UK: Emerald Group Publishing.
- Kerlinger, F. N. (1970). Foundations of behavioural research. New York, NY: Holt, Rinehart & Winston.
- Kiegelmann, M. (1996. *The subject writes back: Reflections on ethics in qualitative research*. Paper presented at the American Educational Research Association, New York, NY
- Kincheloe, J. L. (1991). *Teachers as researchers: Qualitative inquiry as a path to empowerment*. London, UK: Falmer.
- Kodama, M. (2000). Strategic community management in a large business. *The Journal of Management Development*, 19(3/4), 190-206.
- Kotter, J. (1996). Leading change. Cambridge, MA: Harvard.
- Kouzes, J. M., & Posner, B. Z. (2002). *The leadership challenge* (3rd ed.). San Francisco, CA: Jossey Bass.
- Kraut, R. E., Lewis, S. H., & Sweezy, L. W. (1982). Listener responsiveness and the coordination of conversation. *Journal of Personality and Social Psychology*, 43, 718–731.
- Kvale, S. (1996). Interviews. London, UK: Sage.
- Kvale, S., & Brinkman, S. (2009). *Interviews: Learning the craft of qualitative research*. London, UK: SAGE.
- Lambert, L. (1998). *Building leadership capacity in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Lambert, L. (2002). A framework for shared leadership. *Educational Leadership*, 59(8), 37-40.
- Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. New York, NY: Cambridge University Press.
- Lawlor, H., & Sills, P. (1999). Successful Leadership -- Evidence from Highly Effective Headteachers. *Improving Schools*, 2(2), 53-60.
- LeCompte, M., & Preissle, J. (1993). *Ethnography and qualitative design in educational research* (2nd ed.). London, UK: Academic Press.
- Leithwood, K., & Duke, D. (1999). A century's quest to understand school leadership. In J. Murphy & K. Seashore-Louis (Eds.), *Handbook of research on educational administration* (2nd ed., pp. 45-72). San Francisco, CA: Jossey-Bass.
- Leithwood, K., & Jantzi, D. (1999). The relative effects of principal and teacher sources of leadership on student engagement with school. *Educational Administration Quarterly*, 35(Supplemental/December), 679-706.
- Leithwood, K., Jantzi, D., & Steinbach, R. (1999). Changing leadership for changing times. Buckingham, UK: Open University Press.
- Lennick, D., & Keil, F. (2011). Moral intelligence 2.0: enhancing business performance and leadership success in turbulent times. St Peter Port, Guernsey: Pearson Prentice Hall.
- Lieberman, A., & Grolnick, M. (1996). Networks and reform in American education. *Teacher's College Record*, 98(1), 7-45.
- Liker, J., & Meier, D. (2007). *Toyota talent*. New York, NY: McGraw-Hill. Lincoln, Y. S. & Guba, F. G. (1985). *Naturalistic inquiry*. Reverley Hills. C.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverley Hills, CA: Sage.
- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, *91*(4), 509-536.
- Lock, A., & Strong, T. (2010). *Social constructivism*. Cambridge: UK: Cambridge University Press.

- Madsen, J., & Mabokela, R. (2002). African American principals' perceptions of intergroup conflict. *Peabody Journal of Education*, 77(1), 35-58.
- Marks, H. M., & Nance, J. P. (2007). Contexts of accountability under systemic reform: Implications for principal influence on instruction and supervision. *Educational Administration Quarterly*, 43(1), 3-37.
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional approaches. *Educational Administration Quarterly*, *39*(3), 370-397.
- Marris, P. (1975). Loss and change. New York, NY: Doubleday.
- Marshall, C., & Rossman, G. (1989). *Designing qualitative research*. Beverley Hills, CA: Sage.
- Martin, P. (2008). Renaisance Generation: the rise of the cultural consumer, and what it means for your business. Avon, MA: Platinum.
- Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, 62(3), 279-300.
- McCrimmon, M. (2006). *Burn! Seven leadership myths in ashes*. Toronto, Canada: Self Renewal Group.
- McLaughlin, M. W., & Talbert, J. E. (2001). *Professional communities and the work of high school teaching*. Chicago, IL: University of Chicago Press.
- McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based teacher learning communities: Professional strategies to improve student achievement. New York, NY: Teachers College Press.
- Ministry of Education. (2006). *Enabling the 21st century learner: An e-learning action plan for schools*. Wellington, New Zealand: Author. Retrieved from http://www.minedu.govt.nz/~/media/MinEdu/Files/EducationSectors/PrimarySecondary/PolicyAndStrategy/ELearningActionPlan.pdf
- Ministry of Education. (2011). *ICT professional development clusters*. Retrieved from http://www.minedu.govt.nz/~/media/MinEdu/Files/RTF/EducationSectors/PrimaryAndSecondary/ICTProfessionalDevelopmentClusters.rtf
- Ministry of Education. (circa 2009). *Learning communities online: a support handbook for cluster schools*. Wellington, NZ: Author Retrieved from http://www.vln.school.nz/groups/profile/2644/lco-handbook/.
- Mintzberg, H. (2004). *Managers, not MBAs: A hard look at the soft practice of managing and management development*. San Francisco, CA: Berrett-Koehler.
- Mishler, E. G. (1990). Validation in inquiry-guided research: The role of exemplars in narrative studies. *Harvard Educational Review*, 60(4), 415-442.
- Mohr, J. W. (2001). Implicit terrains: Meaning, measurement, and spatial metaphors in organizational theory. In M. J. Ventresca & J. Porac (Eds.), *Constructing Industries and Markets*. London, UK: Elsevier Science.
- Morrison, K. R. B. (1993). *Planning and accomplishing school-centred evaluation*. Norfolk, UK: Peter Francis Publishers.
- Morrison, M. (2012). Ethnography. In A. Briggs, M. Coleman & M. Morrison (Eds.), *Research methods in educational leadership and management* (pp. 205-222). London, UK: SAGE.
- Mouly, G. J. (1978). *Educational research: The art and science of investigation*. Boston, MA: Allyn & Bacon.
- Munby, S. (Ed.). (2003). Broad and deep: A whole authority approach to motivation and learning. Mersey, UK: Knowsley Local Education Authority.

- National College for School Leadership (NCSL). (2007). *System leadership:* Lessons from the literature. Nottingham, UK: NCSL.
- Nonaka, I., & Takeuchi, F. (1995). *The knowledge creating company: How Japanese companies create the dynamics of innovation*. New York, NY: Oxford University Press.
- O'Leary, Z. (2004). The essential guide to doing research. London, UK: SAGE.
- Oakley, A. (1981). Interviewing women: A contradiction in terms. In H. Roberts (Ed.), *Doing feminist research* (pp. 30-61). London, UK: Routledge & Kegan Paul.
- OECD. (2000). *Knowledge and skills for life: First results from PISA 2000*. Paris: Organisation for Economic Cooperation and Development.
- OECD. (2001). *What Schools for the Future?* : OECD. Retrieved from http://dx.doi.org/10.1787/9789264195004-en
- OECD. (2008). Improving school leadership: Volume 2: Case studies on system leadership. Paris: OECD.
- OECD. (2010). Trends Shaping Education 2010. Paris: OECD.
- OtagoNet. (2009). AotearoaNet: a national organisation for the 'Mahi Tahi'/ VLN-C community. Author. Roxburgh, New Zealand.
- OtagoNet. (2012). Draft proposal for reclICTPD funding. Author. Roxburgh, NZ.
- OtagoNet. (circa 2003). *Promoting Collaboration Collaborative Innovations Funding*. Funding application. Author. Wanaka, NZ.
- Palestini, R. (2011). *Leading with mind and heart* (3ed.). Plymouth, UK: Rowman & Littlefield.
- Parliament, N. Z. (2012). *Inquiry into 21st century learning environments and digital literacy*. Wellington, New Zealand: Author Retrieved from http://www.parliament.nz/en-nz
- Patton, M. Q. (1980). Qualitative evaluation methods. Beverley Hills: CA: Sage.
- Peel, K. (2008, March 4, 2008). *Leadership, governance and partnership development*. Paper presented at the Next Practice in System Leadership Conference,
- Peterson, P. L., McCartney, S. J., & Elmore, R. F. (1996). Learning from school restructuring. *American Educational Research Journal*, 33(1), 119-153.
- Pettigrew, A. M., & Fenton, E. M. (2000). *Innovating organization*. London, UK: Sage.
- Pettigrew, A. M., Whittington, R., Melin, L., Sanchez-Runde, C., Van Den Bosch, F., Ruigrok, W., & Numagami, T. (2003). *Innovative forms of organizing: International perspectives*. London, UK: Sage.
- Pfeffer, J., & Sutton, R. I. (2006). *Hard facts, dangerous half-truths, and total nonsense: Profiting from evidence-based management*. Boston, MA: Harvard Business Press.
- Porritt, V. (2010). How to ... lead and support innovative professional development. *Professional Development Today*, *13*(3), 20-24.
- Powell, A., & Barbour, M. K. (2011a). An examination of government policies for e-learning in New Zealand's secondary schools. *Journal of Open, Flexible and Distance Learning, 15*(10). Retrieved from http://journals.akoaotearoa.ac.nz/index.php/JOFDL/article/view/17
- Powell, A., & Barbour, M. K. (2011b). Tracing international differences in online learning development: An examination of government policies in New Zealand. *Journal of Open, Flexible and Distance Learning, 15*(1), 75-89.

- Powell, A., & Patrick, S. (2006). An international perspective of K-12 online learning: A summary of the 2006 iNACOL international e-learning survey. Vienna, VA: International Association for K-12 Online Learning. Retrieved from http://www.inacol.org/research/docs/InternationalSurveyResultsSummaries.pdf
- Pratt, K., Pullar, K., & Trewern, A. (2011). School is out: students' experiences of non-traditional learning. Wellington, New Zealand: Ministry of Education. Retrieved from http://www.tlri.org.nz/tlri-research/research-completed/school-sector/school-out-students-experiences-non-traditional
- PricewaterhouseCoopers LLP. (2007). *Independent study into school leadership*. Nottingham, UK: Department for Education and Skills. Retrieved from http://dera.ioe.ac.uk/6366/1/RR818A.pdf
- Pring, R. (1984). The problems of confidentiality. In M. Skilbeck (Ed.), *Evaluating the curriculum in the eighties* (pp. 38-44). Sevenoaks, UK: Hodder & Stoughton.
- Pullar, K. (2002). OtagoNet shows the way. *New Zealand Education Gazette*. Retrieved from http://www.edgazette.govt.nz/Articles/Article.aspx?ArticleId=6209
- Pullar, K., & Brennan, C. (2008). Personalising learning for secondary students working in a blended (distance/face to face/vocational) learning environment. *Computers in New Zealand Schools*, 20(2), 6-16.
- Pullar, K., & C, B. (2008). Personalising learning for secondary students working in a blended (distance/face to face/vocational) learning environment. *Computers in New Zealand Schools*, 20(2), 6-16.
- Raelin, J. A. (2003). The leaderful community. *Innovative Leader*, 12(6). Retrieved from http://www.winstonbrill.com/bril001/html/article_index/articles/551-600/article579_body.html
- Reinharz, S. (1992). Feminist methods in social research. New York, NY: Oxford.
- Roberts, R. (2008). Leaders of the e-learning evolution. *New Zealand Education Gazette*. Retrieved from http://www.edgazette.govt.nz/Articles/ Article.aspx?ArticleId=7719
- Roberts, R. (2009). Video conferencing in distance learning: A New Zealand schools' perspective. *Journal of Distance Learning*, 13(1), 91-107.
- Roberts, R. (2010). Increasing access for learners: The Virtual Learning Network. In V. Ham & D. Wenmoth (Eds.), *e-Learnings: Implementing a national strategy project for ICT in education*, 1998-2010 (pp. 144-152). Christchurch, New Zealand: CORE Education.
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). School leadership and student outcomes: Identifying what works and why. Best evidence synthesis. Wellington, New Zealand: Ministry of Education.
- Robinson, V. M. J. (2001). Embedding leadership in task performance. In K.-C. Wong & C. Evers (Eds.), *Leadership for quality schooling* (pp. 90-102). London, UK: RoutledgeFalmer.
- Robinson, V. M. J. (2007, October). School leadership and student outcomes: Identifying what works and why. Paper presented at the New Imagery for Schools and Schooling Conference, Sydney, Australia.
- Schlechty, P. C. (1988). Leading cultural change: The CMS case. In A. Lieberman (Ed.), *Building a professional culture in schools* (pp. 185-221). New York, NY: Teachers College Press.

- Schleicher, A. (2012). Preparing teachers and developing school leaders for the 21st century: Lessons from around the world. Paris: OECD.
- Schwandt, T. (1994). Constructivist, interpretivist approaches to human inquiry. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 118-137). Thousand Oaks, CA: Sage.
- Scott, J. (1990). *A matter of record, documentary sources in social research*. Cambridge, UK: Polity Press.
- Senge, P. (1990). The fifth discipline: The art and practice of the learning organization. New York, NY: Doubleday.
- Senge, P. (2000). Schools that learn. New York, NY: Doubleday.
- Senge, P. M., Cambron-McCabe, N., Lucas, T., Smith, B., & Dutton, J. (2012). Schools that learn: A fifth discipline fieldbook for educators, parents, and everyone who cares about education (Rev. ed.). London, UK: Crown Business.
- Sergiovanni, T. (1993). *Building community in schools*. San Francisco, CA: Jossey-Bass.
- Sergiovanni, T. (1994). *Building community in schools*. San Francisco, CA: Harvard.
- Sergiovanni, T. J. (1990). *Value-added leadership: how to get extraordinary performance in schools*. New York, NY: Harcourt Brace Jovanovich.
- Sergiovanni, T. J. (2001). Moral authority, community and diversity: Leadership challenges for the 21st century. In K. Wong & C. Evers (Eds.), *Leadership quality for schooling: International perspectives* (pp. 1-12). London, UK: Falmer.
- Sergiovanni, T. J. (2005). Organization, market and community as strategies for change: what works best for deep changes in schools *Extending educational change* (pp. 296-315). Houten, Netherlands: Springer.
- Shirkey, C. (2008). Here comes everybody. New York, NY: Penguin.
- Silverman, D. (2010). Qualitative research. London, UK: SAGE.
- Snyder, W. M., & Briggs, X. d. S. (2003). *Communities of practice: A new tool for government managers*. Retrieved from http://www.businessofgovernment.org/pdfs/Snyder_report.pdf
- Somekh, B., & Lewin, C. (2005). *Research methods in the social sciences*. London, UK: SAGE.
- Spillane, J. P. (2005). Primary school leadership practice: How the subject matters. *School Leadership and Management*, 25(4), 383-397.
- Spillane, J. P. (2006). Distributed leadership. San Francisco, CA: Jossey-Bass.
- Spillane, J. P., & Seashore, K. (2002). School improvement processes and practices: Professional learning for building instructional capacity. In J. Murphy (Ed.), *The educational leadership challenge: Redefining leadership for the 21st century* (pp. 83-104). Chicago, IL: University of Chicago Press.
- Stagich, T. (2001). *Collaborative leadership and global transformations*. New York, NY: 1st Books Library.
- Standards DCSF. (2007). *Federation regulations*. Retrieved from http://www.standards.dfes.gov.uk/federations/what_are_federations/17986 35/?version=1
- Standards DfES site. (2008). *School diversity*. Retrieved from http://www.standards.dfes.gov.uk/schooldiversity/
- Starkey, L., & Stevens, K. (2007). Three stages in the digital integration of New Zealand schools. *New Zealand Annual Review of Education*, 16, 105-117.
- Starratt, R. (2004). Ethical leadership. San Francisco, CA: Jossey-Bass

- Sterling, S. (2009). Learning for resilience, or resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education. *Environmental Education Research*, *16*(5-6), 511-528.
- Stevens, K., & Moffatt, C. (2003). From distance education to e-learning: The organization of open classes at local, regional and national levels. In J. Bradley (Ed.), *The open classroom: Distance learning in and out of schools* (pp. 171-180). London, UK: Kogan.
- Stoll, L., Bolam, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A., & Hawkey, K. (2006). *Professional learning communites: Source materials for school leaders and other leaders of professional learning*. London: Innovation Unit, DfES, NCSL and GTC.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258.
- Storey, J. (Ed.). (2003). *Leadership in organizations: Current issues and key trends*. London, UK: Routledge.
- Straus, S. G., Miles, J. A., & Levesque, L. L. (2001). The effects of videoconference, telephone, and face-to-face media on interviewer. *Journal of Management*, 27(3), 363-381.
- Technology Colleges Trust. (2000). *One world one school*. London, UK: Specialist Schools and Academies Trust
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. London and Philadelphia: Falmer Press.
- Thrupp, M. (2005). The National College for School Leadership: A critique. *Management in Education*, 19(2), 13-19.
- Thrupp, M., & Willmott, R. (2003). *Education management in managerialist times, beyond the textual apologists*. Maidenhead, UK: Open University Press.
- VLN. (n.d.). *Virtual learning network*. Retrieved from www.virtuallearning.school.nz
- Wagner, P. A., & Simpson, D. J. (2009). *Ethical decision making in school administration: Leadership as moral architecture*. Thousand Oaks, CA: SAGE.
- Webb, R., Vulliamy, G., Sarja, A., & Hämäläinen, S. (2006). Globalization and leadership and management: a comparative analysis of primary schools in England and Finland. *Research Papers in Education*, 21(4), 407 432.
- Weedon, C. (1997). Feminist practice and poststructuralist theory (2ed.). Cornwall, UK: Wiley.
- Wenger, E. (2008). *Communities of practice: A brief introduction*. Retrieved from http://wenger-trayner.com/wp-content/uploads/2012/01/06-Brief-introduction-to-communities-of-practice.pdf
- Wenger, E., McDermott, R., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.
- Wenger, E., & Snyder, W. (2000). Communities of practice: The organisational frontier. *Harvard Business Review*, 78(1), 139-145.
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard.
- Woods, C. (2006). *Collaborating to succeed*. Scotland: Europa.
- Wright, N. (2001). Leadership, 'bastard leadership' and managerialism. *Educational Management and Administration*, 29(3), 275-290.

- Wright, N. (2010). *e-Learning and implications for New Zealand schools: A literature review*. Wellington, New Zealand: Ministry of Education
- Youngs, H. (2007, October). *Challenging our habitual assumptions of school leadership*. Paper presented at the New Imagery for Schools and Schooling, Sydney, Australia.
- Zaleznik, A. (1989). The managerial mistique. New York, NY: Harper Collins.
- Zmuda, A., Kuklis, R., & Kline, E. (2004). *Transforming schools: Creating a culture of continuous improvement*. Alexandria, VA: ASCD.
- Zuboff, S., & Maxmin, J. (2004). The support economy: Why corporations are failing individuals and the next episode of capitalism. New York: Penguin Books.