

My Head is Always Full!

**Principals as leaders in a post disaster setting:
Experiences in Greater Christchurch since 2010 and
2011 earthquakes**

Christchurch, New Zealand

Gerard A. Direen

2016

Abstract

If you don't stand for something, you'll fall for anything.

- Alexander Hamilton

The aim of this study is to examine the leadership experiences of principals in Greater Christchurch's post disaster setting, following the 2010 and 2011 earthquakes, and to document lessons learned.

The study was based on the belief that something is different in an extended post-disaster setting, in relation to what is demanded of school leadership, and the responses that are required for success. In a period of extended and heightened change something beyond the usual is expected. The ordinary needs to adapt to the extraordinary.

From August 2015 to March 2016, I conducted a study on the experiences and perspectives of twenty primary school principals in Christchurch. The study focused on the period from late 2012, following the Government announcement of school merger-closure proposals, and then from mid-2013 when the school rebuild programme began to be implemented.

The key findings of this research include that the main factors supporting leadership of principals are in-school colleagues, mentors and principal networks, beliefs and values and prior experience; barriers to successful leadership include unrealistic expectations, workload, compromised wellbeing and the Christchurch Schools Renewal Programme; lessons learned were the importance of interpersonal skills, self-awareness, conscious leadership and beliefs and values; and the recommendations made were that successful school leadership in this post-disaster context appears to centre on connected leadership, that establishes strong support networks and collaborative professional relationships, conscious leadership, that holds a clear sense of moral purpose and self-awareness, and adaptable leadership, that responds accurately to a rapidly changing context.

The study concludes that there is need for further research to be done on the impact of policy decisions and initiatives taken to support schooling and enhance education in this setting, to ascertain the extent to which these have been successful, and to identify where modifications could be made to support successful school leadership.

Table of Contents

Contents

Abstract.....	3
Table of Contents	4
List of figures and tables.....	6
Figures	6
Tables.....	6
Glossary.....	7
Section 1: Introduction.....	8
Study aim and questions.....	9
Personal position and motivation.....	9
Study structure.....	11
Section 2: The Context	12
Introduction	12
Schools and education	13
Developments in education.....	15
Section 3: Methodology.....	16
Semi-structured interviews and survey questionnaire.....	16
The principals	17
The schools	17
Previous research	19
Analysis and reporting.....	19
Section 4: Previous Research.....	21
School improvement.....	21
Sustainable leadership.....	22
Conscious leadership and moral purpose	23

Adaptive expertise	24
School leadership in the New Zealand Setting	25
Greater Christchurch context.....	27
Section 5: Findings.....	31
What factors most supported principals in their leadership roles?.....	31
What have been the barriers to successful leadership?	35
What lessons did principals learn about leadership from these experiences?	39
What recommendations would principals make based on these experiences?	42
SECTION 6: Discussion and conclusion	45
Factors that most supported principals in their leadership roles	45
Connected leadership	45
Conscious leadership and moral purpose	47
Adaptive leadership	49
Barriers to successful leadership	50
Lessons learned about leadership	52
What was surprising?	53
Recommendations - sustaining the gains	54
Conclusion	56
References.....	59

List of figures and tables

Figures

- Figures 3.1 Geographic spread
- Figure 3.2 School decile ratings

Tables

- Table 3.1 School size
- Table 5.1 Main factors identified as supporting leadership
- Table 5.2 Main factors identified as barriers for leadership
- Table 5.3 Lessons learned about leadership

Glossary

BES	Best Evidence Synthesis
COL	Community of Learning
CPPA	Canterbury Primary Principals Association
CSR programme	Christchurch Schools Renewal programme
ERO	Education Review Office
KLPM	Kiwi Leadership for Principals model
LCC	Learning Community Cluster
NZCER	New Zealand Council for Education Research
NZEI	New Zealand Education Institute
NZPF	New Zealand Principals Federation
OECD	Organisation for Economic Cooperation and Development
STA	School Trustees Association

Section 1: Introduction

“My Head is Always Full!”

Each day principals are charged with leading our education system in the place where the rubber meets the road, where aspirations for children’s learning turn to actions, and where policy unfolds as practice. It is often said that principals are at the centre of why a school succeeds or doesn’t. Parents, communities and governments look to principals to lead the charge in getting the best out of teaching and learning for today’s children and for society’s future. Various publications outline where principals as leaders in their schools can make the most impact on children’s learning outcomes, school culture and community engagement. High quality leadership is expected of principals under normal conditions. However, even more is expected of principals in an extraordinary context, like that experienced in the years following the 2010 and 2011 earthquakes.

A disaster, such as the 2010 and 2011 earthquakes, disrupts the ordinary. Systems, organisations, infrastructure, relationships and decision-making are all tested and usually need to be modified. New legal arrangements often appear and specific laws are sometimes enacted to respond to the extraordinary circumstances that emerge. Schools in Greater Christchurch traded-in the ordinary for the extraordinary, for an extended period.

The 2010 and 2011 earthquakes experienced in Greater Christchurch caused a lot of damage and disruption to education services and institutions. About 150,000 students and 10,000 staff were affected. From September 2012 things got even more complex. Schools were faced with proposed school mergers and closures; the introduction of the one billion dollar Christchurch School Renewal Programme; the accelerated roll-out of modern learning environments for schools; the introduction of enrolment zones; and change in decile ratings that affected some schools’ funding, as well as other dynamics that required principals to lead in decision making processes across an increasing range of issues.

This section introduces the study topic and outlines its main questions and how the study was conducted. It briefly describes the context schools found they were in following the 2010 and 2011 earthquakes. It goes on to explain some important concepts related to school leadership. The section gives a brief outline of what else is contained in the study.

Study aim and questions

The aim of this study is to examine the leadership experiences of principals in Christchurch's post disaster setting resulting from the 2010 and 2011 earthquakes, and to document some lessons learned in this setting. This study sought to answer four main questions:

Question 1: What factors most supported principals in their leadership roles?

Question 2: What have been the barriers to successful leadership?

Question 3: What lessons did principals learn about leadership from these experiences?

Question 4: What recommendations would principals make to others based on these experiences?

From August 2015 to March 2016, I gathered information from twenty primary school principals in Greater Christchurch. These principals and their schools had all been affected by the 2010 and 2011 earthquakes; the resulting impacts of these earthquakes on children, parents and communities and how these communities responded; as well as by the subsequent Government responses to address the impacts of the disaster. I used qualitative research methods to conduct this study. I looked at literature to gain greater understanding of school leadership and also about leadership in a post disaster setting. The main concepts of school leadership I was interested in exploring were moral purpose, adaptive expertise, change management and sustainable leadership.

Personal position and motivation

I am an advocate for practitioner-led research and saw this as a rare opportunity to look at leadership through a different lens. One of the main factors influencing the origin of this study was my own experience as a principal in Christchurch from mid-2012. In September 2012, about two months after having accepted this position, I found myself at a meeting with other principals from Greater Christchurch being told about school closures and mergers across the city. Our school was proposed to merge with another local school. This moment placed our school leadership path on a very different direction than I had anticipated when I

made my application, focusing then on strategic leadership and curriculum development. I now had to focus on the implications of this proposed merger. This process took around 6 months to reach a conclusion. Other principals in this study have echoed the sentiment that their leadership direction changed from this moment, as never before. In the end the decision was made not to merge our school with another. However a path of unexpected events continued to unfold.

Early in 2013 we were involved in a Government-led community consultation process about the future provision of Years 7-8 children, related to the pending closure of a local Intermediate School. . Later in 2013 we began discussions with the Ministry of Education and other local schools about special education provisions to address heightened children's needs in our disrupted post-disaster communities. Also in 2013, the Ministry introduced a new arrangement for clustering schools together, the Learning Community Clusters model (LCC). This presented both opportunities and challenges, but most importantly it brought another layer of change. The Christchurch School Renewal Programme (CSR) was rolled out in mid-2013 and our school began discussions and planning in relation to this in 2014. From 2015, we entered another new framework for cross-school collaboration namely the Communities of Learning model that resulted from a nationwide Government policy. We were also grappling with sector issues such as the establishment of enrolment zones and ongoing support for increasingly diverse communities.

These factors and more were layered on top of shifts in Education towards modern learning environments and increasingly digital learning environments that were expected of all schools. During 2013, a significant nation-wide payroll system crisis emerged across New Zealand schools. Its implications were felt for over a year and workload for principals grew as a result.

From my experience as a principal, I found this context extremely challenging. The extent of change, the layers of ongoing and unexpected demands and the complexity of leading change in an uncertain context, were overwhelming at times. I was curious about the experiences of other principals. Were their experiences similar to my own? I wondered what the expectations were from Government leaders, from those leading the earthquake recovery programmes across the city, from parents and communities, in relation to how principals should lead in this setting.

I intended this study in the first instance to be of interest and of use to principals in Greater Christchurch, and for them to make use of it in this context over the next five years, as the renewal and rebuild period continues. I also hope that this study is of interest to those beyond this setting, for example those facing unprecedented levels of change and challenges, including having to make rapid decisions without significant information at hand to guide them, and who need to operate in a context outside their area of expertise or direct experience.

Towards the end of 2016, I have chosen to resign from my principal role. While I am taking with me a great deal of learning, about leadership and about myself, I also want to contribute to the setting that has taught me so much. In my view, this is a great opportunity for New Zealand educators to learn about school leadership in real time. I hope that this study plays some part in that learning.

Study structure

Section 1 has briefly introduced the study topic, its aims and questions. It has outlined the context of this study and the methods used. I also explained why I undertook this study.

Section 2 situates this study within the context of Greater Christchurch. It describes the impact of the 2010 and 2011 earthquakes, especially their effect on schools and the education system.

Section 3 focuses on the methodology used for this study.

Section 4 reviews some existing research that has been conducted on school leadership and literature that provides guidance on school leadership in New Zealand. This section also looks at concepts such as conscious leadership and moral purpose, adaptive expertise and sustainable leadership.

Section 5 presents the findings from interviews and survey responses.

Section 6 discusses themes drawn from existing literature and this study's findings. It also looks at aspects of leadership that were important to principals. I end by considering the recommendations made by principals, limitations of this study, and identifying where further research could be undertaken.

Section 2: The Context

Introduction

The 2010 and 2011 earthquakes began on 4 September 2010, with a 7.1 magnitude quake close to the city. The most destructive earthquake occurred on 22nd February 2011, and resulted in significant loss of life and injury, damage to buildings and other infrastructure. Several significant and destructive earthquakes caused ongoing damage and disruption across Greater Christchurch in the 18 months following these two earthquakes. Over 14,000 aftershocks have occurred in the following five years.

The immediate crisis response period began after the September 2010 earthquake and lasted until about late 2011. In early 2012, the crisis began to lessen considerably and shifted into a recovery phase.

The 2010 and 2011 earthquakes did not play an even hand in terms of the impacts felt across the city. For example, the eastern suburbs and central city were severely affected. Here, the earthquakes caused more damage to buildings and roads, greater disruption to family life and more population shifts from the east to the west of Christchurch, and into Selwyn and Waimakariri districts. Some parts of the city had minimal physical damage but many living in those areas still felt impacts on their lives, with workplaces and communities around them changing. Overall, changing community demographics, loss of facilities, interruption to previous lifestyles and relationships were some of the main features felt widely across the city. In the years immediately following the earthquakes the number of referrals to health services for mental health support increased dramatically.

An extensive redesign of parts of the city began to be put in place from 2011 and included a vision process that collected over 100,000 ideas through the Christchurch City Council's Share an Idea campaign (2011). Over \$40 billion was estimated for the official rebuild of the city, its infrastructure, public amenities and private developments. This process is expected to take well over ten years, and involve significant partnerships between central and local Government and private business, international and local investment, community groups and organisations, with innovative ideas being sought from far and wide to help shape the

city's rebuild. However the presence of earthquakes or after-shocks remains part of the physical, social and emotional scene and is until today still being experienced.

Schools and education

Ongoing change and reform have been part of NZ primary schools' reality since the late 1990s, including substantial curriculum developments, national assessment standards being introduced and the increasing role of new technologies in learning and teaching. However, for many Greater Christchurch schools, the changes unfolding since 2011 have been at a level never experienced before. Government at all levels has also had to adjust to unprecedented demand on its capacity to lead, support and respond to evolving education needs. The Ministry of Education has had to adjust rapidly to a series of demands from the sector that it has not had to cater for previously.

When the major earthquake struck on February 22nd 2011, approximately 150,000 students and 10,000 staff were involved in Education settings across the city (ERO, 2013). In wider Canterbury, 215 schools were damaged to some extent in the 2010 and 2011 earthquakes. Nearly all would be disrupted and altered to varying degrees in the years that followed. Nine primary and secondary schools were forced to temporarily relocate due to damage to their buildings and grounds. They entered into site-sharing arrangements with another school to enable them to continue to function with minimal disruption. Some are still temporarily relocated in 2016. Ham et al (2012), reported on the site-sharing experiences of some schools in Christchurch post-earthquakes.

Every school principal, their staff and communities have had to meet the challenges of their unique context. This includes physical damage to buildings and facilities, staff capacity and development needs, board capacity and changing relationships with other local schools. Each principal had a variety of skills, knowledge or experience to call upon to help them cope in the context they found themselves in. Principals have had to accurately identify how to best approach leadership in their different settings.

In 2013, the Education Review Office (ERO) produced a report based on information gathered from schools and early childhood centres during 2012. This report stated that: "The school was seen as a vital hub in the local community for not only the families attending the

school, but also the wider community. Giving to others and connecting with the community was a very positive outcome of the crisis (for schools) created by the Canterbury earthquakes.”

The ERO report (2013) covers four key themes that emerged from the stories gathered about how schools and early childhood services responded to the 2010 and 2011 earthquakes. They mostly concerned keeping children safe, supporting children’s learning, supporting staff and families, and managing ongoing anxiety. These themes provide a useful window into what dominated the work of schools for some months following the 2010 and 2011 earthquakes.

The report went on to state, “The Chief Science Advisor, Professor Sir Peter Gluckman, commented on the psychological consequences of the Canterbury earthquakes. He stated that community engagement and empowerment are essential to speed up psychosocial recovery after the Canterbury earthquakes.⁴ The Greater Christchurch Recovery Strategy notes the need to grow capacity, knowledge and skills within the community to build resilience. It suggests delivering services, such as education, that are collaborative, accessible, innovative and flexible.”

Two key events shape the period investigated in this study, in relation to school change. First, the announcement by Government in September 2012 of the school re-organisation for Christchurch, where 13 school closures were proposed, and another 18 were proposed to merge. Other changes were also signalled that day. The second, the release of the Christchurch Schools Renewal Programme (CSR programme) late in 2013, where the Government announced plans to spend over \$1 billion dollars on the rebuild, redevelopment and renewal of over 100 Christchurch schools.

In mid September 2012, the Minister of Education proposed that 13 of the city’s schools would close, 18 would merge, seven schools would relocate on new sites, some new schools would be built especially in outer suburbs or towns, and one merger of five schools would take place to form a new Years 1-13 school. For the people directly concerned, for their communities and for Government agencies, these were hugely complex moments, especially given the post-disaster context within which they arose.

The CSR programme began to be rolled out in late 2013. It was expected to take ten years. In 2016, much remains to be done. One example of the challenges faced is the planned co-location of two single-sex secondary schools on a shared site, along with a range of

community facilities, to the east of the city. This development is estimated to cost \$80 million dollars and the schools are due to open in 2019. Planning for this project has been going on for about three years. Some other schools that were identified to relocate from their original site are still awaiting a decision (in mid-2016) about where that will be.

The outcomes of some Government decisions have resulted in dissatisfaction and controversy, with a report from the Ombudsman's Office late in 2012 highlighting shortcomings in information sharing, and appeals to the High Court being taken by some schools. One proposed school closure case still remained unresolved early in 2016.

Developments in education

The changes brought on from the 2010 and 2011 earthquakes were compounded by the wave of change coincidentally sweeping Education internationally, including across New Zealand. This has included a re-examination of what good teaching and learning are all about. It involves the extent to which the place of digital technologies determines the way forward for schools and learning. The main purpose of schooling is being re-examined across many countries. This has raised questions about how school systems respond to changing social and economic conditions unfolding rapidly from the late twentieth century.

The 2010 OECD report "The Nature of Learning" provides a clear account of the various factors being considered in school design and the development of Education systems internationally. Close consideration is being given to concepts such as the Knowledge Economy, changing technology, self-directed learning and community engagement. Theory and practice are being closely revisited across countries and settings.

Section 3: Methodology

The aim of this study is to examine the leadership experiences of principals in Greater Christchurch's post disaster setting resulting from the 2010 and 2011 earthquakes, and to document some lessons learned in this setting. This study sought to answer four main questions:

Question 1: What factors most supported principals in their leadership roles?

Question 2: What have been the barriers to successful leadership?

Question 3: What lessons did principals learn about leadership from these experiences?

Question 4: What recommendations would principals make to others based on these experiences?

The focus of this study is on the post-disaster years from mid-2012 to 2016, following the initial crisis response, when Government planning began to emerge across the school sector. I did two main things to help me understand what leadership looked like in this setting. Firstly I interviewed 10 principals and gathered survey responses from 10 others, and secondly I looked at literature on school leadership and change.

Semi-structured interviews and survey questionnaire

The main method used to gather information was semi-structured interviews. These interviews were nearly all done at the principals' schools, during Term three 2015. After the interviews it was interesting to note the common themes that emerged from the ten principals. I felt I needed to get more data before drawing final conclusions. A follow-up survey was administered to another ten principals early in 2016. These principals were asked to fill out a questionnaire that had similar questions to those asked of the principals who were interviewed.

The study used an open-ended approach in questioning principals, to allow for collection of rich data in story format. I preferred collecting qualitative information, as it is the

stories and experiences of the principals that I was most interested in. I wanted the principals to talk about leadership with limited parameters, because I wanted to allow for a breadth of leadership issues in a post-disaster setting to surface. I didn't ask questions directly about school improvement, moral purpose, adaptive expertise or sustainable leadership. I was confident these themes would emerge in our discussions because they had emerged in other discussions with principals outside this study, and from other research.

The principals

Of the 20 participants who took part in this study, 8 were females and 12 were male. All except one of the twenty principals had at least five years' experience as a principal before the 2010 and 2011 earthquakes. Most had led more than one school during their career. No beginning principals were included in this study because I wanted principals to be able to speak to leadership in a post disaster setting having experienced leadership in ordinary times. The majority had around 10 years' experience as a principal. No schools from the Linwood cluster in which I am a principal were included in this study, to help limit bias from my previous experiences and what I already knew of the schools. Some principals maintained the networks of relationships that existed before the earthquakes, while others suffered loss of relationships with principals in their area due to competing demands for time, the changing nature of priorities, and new partnerships made to realign with proposed or newly-formed school cluster arrangements.

The schools

In selecting the principals that participated in this study, I wanted to ensure that there was diversity in the size, geographic spread, decile rating, and the impacts of the 2010 and 2011 earthquakes on the schools of these participating principals.

School size: The size of the schools ranged from roll numbers of around 100 children to over 600. The spread of school size saw just under 50% in the 200-300 children band, with three schools having less than 200 children, and the remainder above 300 (eight schools).

Table 3.1: School size

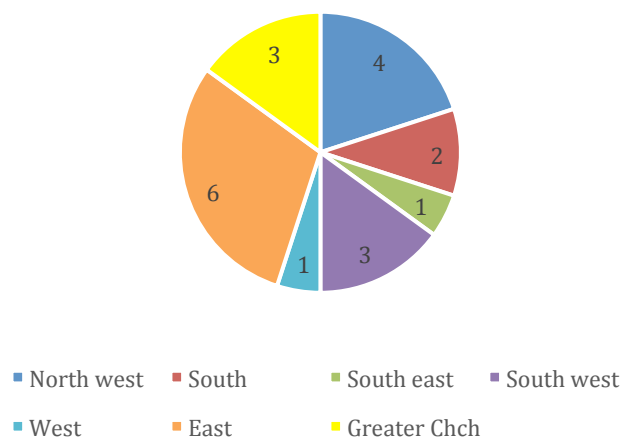
Class	No. of Schools	Size
Low	1	100
	1	140

	1	200
Medium	2	230
	1	250
	5	270
	1	300
	1	400
Large	3	450
	1	480
	2	500
	1	600

Source: Author.

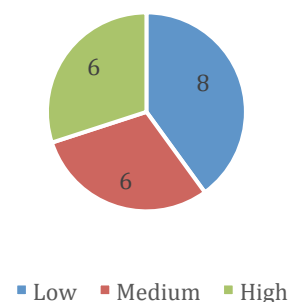
Geographic spread: In terms of geographical spread and location, seven schools were from the east and southeast of Christchurch, five from the south and southwest of the city, four from the northwest and three from the outskirts of the city in the Greater Christchurch area. The geographical spread gives an indication of how widespread the impacts of the earthquakes were on school communities and leadership.

Figure 3.1: Geographic spread



Decile rating: Schools are categorised by the Government for school funding purposes according to a measure of the socio-economic make-up of their immediate community (a decile rating from 1 to 10). Schools are usually categorised in bands – low (decile 1-3), mid (decile 4-7) and high (decile 8-10). Low represents communities that have the highest levels of social disadvantage and poverty. Eight schools in this study were low decile, six were mid decile and six were high decile. Figure 3.2 shows the decile ratings.

Figure 3.2: School decile ratings



Impact of 2010 and 2011 earthquakes: The schools in this study were affected differently by the 2010 and 2011 earthquakes' impacts, causing varying degrees of leadership challenges for principals. The earthquakes immediately affected some schools, while others were impacted on by decisions made by communities and central government in the post disaster setting.

Schools that were impacted immediately by the 2010 and 2011 earthquakes suffered property damage, immediate roll changes, site sharing arrangements, closure and merger proposals and decisions, and changes in the community around them (e.g. from property or facility damage caused by the earthquakes). Flow-on impacts of the earthquakes included school rebuild programmes and changing school cluster arrangements. Some schools had full school rebuilds or a move to a new site; while some were affected by delays in the rebuild programme or restrictions due to the budget allocation for this purpose. Population changes such as school roll growth, increasing ethnic diversity caused by children whose parents have migrated to contribute to the rebuild of the city, also impacted on schools.

Previous research

I researched a series of articles and publications regarding school leadership, school change and school improvement, mainly in New Zealand contexts. I looked at the guidelines and expectations for school principals set down in Government publications, such as the Best Evidence Synthesis regarding school leadership, the Kiwi Leadership for Principals model that describes qualities, knowledge and skills needed to lead a New Zealand school, and the domain of leadership as evaluated in school reviews by the Education Review Office. I read literature regarding moral purpose in leadership, the concepts of adaptive expertise and sustainable leadership.

Analysis and reporting

Once the information was gathered and background reading complete, I set about organising the data into categories before analysing it. I used thematic analysis to make sense of the key messages that emerged, and to look for links to the previous research I had read.

I began by going through the data gathered from the 10 semi-structured interviews. I organised this data into board categories that were useful for identifying themes. I then went

through the data collected through the survey questionnaires. This data was sorted out into the same categories I had developed from the interview data. As themes began to emerge clearly I started to analyse the data. This process prepared me for the writing of the findings and discussions sections that follow in this study.

Section 4: Previous Research

Educational change in the twenty-first century is rapid and complex. Schools and education systems around the world are reconsidering the design and approach to schooling, teaching and learning. Education reforms and developments have been gaining pace over the past decade. These are informed by international research, experience and reports such as the OECD's (2010) *The Nature of Learning*.

The challenges of effectively leading school change were already on the table for Greater Christchurch school leaders when the 2010 and 2011 earthquakes occurred. An already demanding and complex undertaking became even more challenging.

Past research and other literature on school leadership is explored in this section. I found very limited research regarding school leadership in post-disaster settings. The section attempts to focus on research and publications that are influencing principals in New Zealand in particular, and that inform thinking regarding school improvement, the characteristics of successful and sustainable school leadership, and that are likely to be relevant to leadership in a post-disaster setting. This section is not intended to be a comprehensive review of leadership theory and practice. The section explores concepts of school improvement and sustainable leadership, conscious leadership and adaptive expertise, school leadership in the New Zealand setting, and the Greater Christchurch context.

School improvement

Stoll and Fink (1996) define school improvement as a series of concurrent and recurring processes. These processes focus on teaching and learning, build capacity within a school and include a school defining its own direction. Stoll and Fink describe different characteristics of improving schools including: having shared goals, working together to achieve these goals, a shared focus on continuous improvement, mutual support and an openness to learn from others.

Stoll (2000) also looked at the place of school culture in a context of ongoing change and the pursuit of improvement. She states that:

Real improvement cannot come from anywhere other than within schools, and “within” is a complex web of values and beliefs, norms, social and power relationships and emotions. Changing schools is not just about changing curricula, teaching and learning strategies, assessment, structures, and roles and responsibilities. It does not happen just by producing plans.

Fullan (2002) describes some key features required to be successful as a leader of sustainable educational reform, in a knowledge society. These include moral purpose, understanding change processes, the ability to improve relationships, knowledge creation and sharing, and coherence making. Sergiovanni (1992) believed that the role of leadership in school improvement had been misconceived. He argued for less of the traditional views of direct leadership. He argued, “improving schools involves identifying the right leverage points for change.” Sergiovanni (1992) also argued for an increasing moral dimension to leadership, one that involves shared emotions, values and aspirations. He also argued for an expansion of the leadership capacity across a school within a collaborative culture. The more self-managed a school becomes, the less important directive leadership is.

Sustainable leadership

Hargreaves and Fink (2004) identify seven principles of sustainable leadership. Some of these include: that leadership leaves a lasting legacy; it lasts because succession is planned for; it spreads because others participate through distributed leadership; it is socially just as it benefits all students and recognises that schools affect one another “in webs of mutual influence.” It’s not just about looking after one’s own school. Hargreaves and Fink argue that systems need to be put in place that provide opportunities for leaders to form networks and to learn from and support one another. They also define sustainable leadership as having an activist component, tirelessly pursuing the schools vision and mission in the wider community, speaking out for what you believe in and for the best interests of students.

Hargreaves and Fink (2004) warn that, “Teachers and school leaders who are burned out by excessive demands and diminishing resources have neither the physical energy nor the emotional capacity to develop professional learning communities.” They argue that “sustainable leadership cannot be left to individuals, however talented or dedicated they are.” Based on Hargreaves and Fink’s understanding of sustainable leadership, leaders and systems

encourage and enable people to learn from each other's' diverse practices, knowledge and experience. As the authors note, "Standardisation is the enemy of sustainability."

Conscious leadership and moral purpose

Fullan (2002) describes moral purpose as having social responsibility to others and the environment, stating that: "school leaders with moral purpose seek to make a difference in the lives of students." He believes that they aim to make a positive difference in their own schools, as well as improving conditions in the wider school sector they operate in. Fullan observes that by sharing ideas and perspectives knowledge becomes useful. He posits that "knowledge creation and sharing fuels moral purpose in schools."

For Fullan, (2000) moral purpose and the ability to build relationships help us to achieve coherence. His belief is that moral purpose is not about having new or more ideas or innovations, it is more about coherence and care. Leaders need to know their people and the likely reactions that arise in a change process, such as resistance and loss of enthusiasm or focus. Finally, successful school leaders must foster other leaders in a variety of levels across the organisation. Fullan states: "a school leader's effectiveness in creating a culture of sustained change will be determined by the leaders he or she leaves behind."

Sergiovanni (1994) gave prominence to the idea of building community in schools, and to the role of a shared moral purpose. He discussed the role of schools as communities with a shared set of values and beliefs about education, and a collective moral commitment and sense of purpose. Principals had a vital role in this according to Sergiovanni. Degenhardt and Duignan (2010) argue that the challenges faced in school leadership can best be addressed through a leader's values, and the shared understanding of what the moral purpose of education is.

Robertson (2016) refers to the place that a leader's moral purpose has in their success. She looked at how leaders learn moral purpose, in relation to equity across schools. She refers to the crucial role that coaching can play in helping a leader explore and understand their moral purpose and its links to social justice principles. She supports the role that a well understood moral purpose can play in building shared understandings across the sector, that lead to better outcomes for all.

Moral purpose can also be located within the broad concept of conscious leadership that has been emerging in recent years, especially in relation to business and corporate leadership. It is a concept that seems to fit with beliefs about what's needed to address the rapidity of change in the twenty-first century, and the call to achieve transformational change. It emphasises the importance of self-awareness, integrity and mindfulness in leadership. It promotes a shift from command and control leadership to a "we culture" within organisations.

The concept of conscious leadership can be linked to clear, well-informed decision-making, to increased self-awareness, to being alert to the impact of change and decisions on others, to moral purpose and integrity as a leader. It reminds us of the need to know where we stand and why, and of the competing demands that can draw leaders away from their core business.

Adaptive expertise

The 2010 OECD report, *The Nature of Learning*, sees adaptive expertise as an essential part of life-long learning. According to the OECD (2010), adaptive expertise encompasses "the ability to apply meaningfully-learned knowledge and skills flexibly and creatively in different situations. This goes beyond acquiring mastery or routine expertise in a discipline. Rather, it involves the willingness and ability to change core competencies and continually expand the breadth and depth of one's expertise."

Timperley (2009) describes adaptive expertise as an essential shift from the routine expertise that has served us well over time, to a level of expertise and self-awareness that the rapid changes in modern society are demanding. Adaptive expertise according to Timperley is based on a moral imperative to address the needs of all children. It involves regularly asking if we are optimising outcomes for children and taking responsibility to ensure that what we do is making a positive difference. In this scenario school leaders need to constantly reflect and question the impact of what they are doing. In Timperley's view, school leaders need to develop organisational adaptive expertise so that teachers can build their capacity. Leaders need to put systems in place that identify what is working well and what isn't, and to respond accordingly, for example by providing targeted professional learning for teachers.

School leadership in the New Zealand Setting

There are several sources that guide what effective school leadership looks like in New Zealand including, the Kiwi Leadership for Principals model (KLPM) from the Ministry of Education, the New Zealand Council for Education Research's studies and the Best Evidence Synthesis of research on leadership, also issued by the Ministry of Education.

The Ministry of Education developed the KLPM (2008) guidelines in cooperation with other sector groups, in response to calls for more localised guidance and expectations about school leadership, specifically the role of the principal. It emphasises qualities, competencies and values that will better enable principals to lead change and solve the problems that they face as school leaders. The Ministry of Education states:

Kiwi Leadership describes an approach to school principalship that is especially suited to the distinctive contexts of Aotearoa New Zealand. Our system of self-management allows principals to respond in ways that are appropriate to the needs and circumstances of their own schools. It draws on the Kiwi "can-do" attitude that is characteristic of New Zealand principals. This attitude is typified by a willingness to take action and achieve results.

The four domains of the KLPM are culture, pedagogy, systems and partnerships. The qualities or values that are said to underpin principals' ability to lead their schools include leading with moral purpose, having self-belief, being a learner yourself and guiding and supporting others. Successfully leading change is a key theme throughout this model. It is widely acknowledged that rapid social, economic and technological changes, that have gathered speed since the late twentieth century, are having a big impact on change management in schools, especially for principals. A post-disaster setting will likely test the usefulness of this model for guiding principals' practices.

Robinson, Hohepa and Lloyd (2009), in the Best Evidence Synthesis (BES) on school leadership, identified eight dimensions of principal leadership that make a difference to students' learning outcomes. These include establishing goals and expectations, resourcing strategically and participating in teachers' professional development, and problem solving. Robinson et al discussed how effectively leaders address problems and what's required to analyse and solve complex problems effectively. They noted problem solving as being central

to all leadership dimensions. The BES posited that the most important aspect of problem solving was successfully specifying the problem's constraints – “the things that must be taken into account when coming up with an adequate solution.” This would seem likely to be a core aspect of success in a post-disaster or crisis context.

Mitchell et al (2002) conducted a study aimed at understanding factors involved in sustainable school improvement in New Zealand. Their report highlighted similarities and differences about understanding of school improvement and what contributes to it. Three different approaches to school improvement were identified as:

- the concept of school improvement as school development, generated by those in the school, to meet local needs, with an emphasis on processes and school culture;
- an emphasis on school improvement as lifting school performance where needed, and with government support, to meet national standards of performance, but in line with schools' culture and values;
- an emphasis on school improvement as focusing on meeting national or international academic standards, within a competitive environment.

According to Mitchell et al (2002), principals, teacher educators, academics, and researchers tended to hold the first approach, which was found to be closest to the experiences of the ten case study schools. The report identified that school vision and goals that are developed and “owned” by the school were seen as necessary for schools to sustain school improvement. The school culture needed to be in line with the vision. Staff professional development was regarded as an essential condition for sustainable school improvement. Clustering and mentoring schemes were regarded as valuable in providing collegial support and pooling expertise. Most participants supported the notion that in a school that's improving, teachers and the principal need to be reflective practitioners, engaged in thinking and talking about educational ideas, teaching, and learning. Effective leadership was highlighted as a key to school improvement, especially by the principals, who discussed the principal's role in building relationships, having an educational vision, setting a model, and recognising and encouraging attributes in others. The workload of principals was seen as a barrier to school improvement, especially for principals in low decile, rural, and small schools. The report concluded:

The need for schools to create conditions to support reflective practice, and for a strong role to be played by government in offering the kinds of resources, support and professional development that enable schools to be effective learning organisations, continually improving.

Boyd (2012) considers change processes in a “business as usual” context (e.g. such as curriculum development) that is useful to compare to an extraordinary, unplanned and unexpected post disaster setting. Boyd states:

Change in schools is a fragile endeavour that is influenced by many variables that exist within the individual system of each school as well as in the wider system which surrounds schools. It is clear that an understanding of the systemic and non-linear nature of change is necessary to effectively plan for change.

Boyd (2012) makes some compelling points about building leadership capacity during periods of change stating the necessity of leadership on multiple levels and processes that build system capability for change to be achieved. Boyd places emphasis on the need to build networks of “effective relationships and collaboration within and between schools” and other key community and professional stakeholders. She concludes:

In this way an initiative can work to bring all stakeholders onboard, using their skills and strengths to assist in building new approaches, while also building capacity in the system through networks of distributed leadership. In this way a community of practice is built around an initiative which is likely to support its longer-term sustainability.

Greater Christchurch context

Some Christchurch principals have studied this post-disaster context over the past few years, including in relation to current developments in New Zealand schools. Other principals have explored what’s different about school leadership in Christchurch post the 2010 and 2011 earthquakes.

Callaghan (2013) looked at the role of professional leaders in the immediate post-disaster setting, with a focus on school culture. Callaghan found that the role of principals was

to support and foster the vision, shared values, expectations and positive, respectful interactions of their schools, and to protect an inclusive atmosphere that surrounds the school. The maintenance of positive relationships across the school community and effective communication were seen as the foundation for a successful school culture. Building shared leadership opportunities for staff was cited as important.

70% of the principals that Callaghan (2013) interviewed found that managing day-to-day tasks took up most of their time. This included the new normal within the schools' rebuilding programme. Working with people was seen as being both the most rewarding and the most challenging aspect of principalship for many. Callaghan found that managing and supporting staff became one of the bigger challenges for principals in this period. Principals reported that they felt comfortable in the realm of curriculum development, but found leading towards the future much more challenging in the world of unexpected changes that rolled out for some, such as school merger proposals. "Who has the time?" was one response. In contrast, another noted: "focussing on the future helps me get through the difficulties of the present."

Callaghan also found that principals were drained and suffering from low morale as a result of the demands and uncertainty that many were facing at that time. One principal noted the huge impacts that the 2010 and 2011 earthquakes had as having "changed the way we see and do things." She concluded that in time of change and challenge the principal's role in keeping a school culture strong was crucial and states that "if the principal has already established a positive effective school culture, then the school is better set up to manage times of uncertainty and change."

Harris (2013) wrote of her experience of what emerged in Christchurch's post-disaster setting:

Having previously led in a decile two school, I am aware that low levels of literacy and cognitive disturbances especially in the new entrant intake are usually more commonplace than they are in higher decile schools. However in post-earthquake Christchurch these issues seem to be the new norm across all demographics within the city. Anxious children, stressed parents, transient families and economic uncertainty are now commonplace within the school community.

Harris captures some of the immediate challenges that schools had to face from 2011, stating that new entrants into high decile schools were no longer necessarily well prepared for learning due to the impact of ongoing anxiety. According to Harris (2013) there is an increase in the number of new entrants who are “having difficulty settling into school and this manifests as increased and prolonged separation anxiety. We have had to revisit the way we transition children into school and we are very aware that any change in routine can trigger anxiety.”

Other publications have also focused on the aspects of Greater Christchurch’s unfolding post-disaster context. Ham et al (2012) reported on the site-sharing experiences of some schools in Christchurch post-earthquakes. They summarised the experience of nine schools that needed to relocate to another school’s site for a period of time. The key findings of the study included that goodwill and commitment of the guest schools and the host schools made co-location a workable solution in disaster situations, but it was not educationally ideal or sustainable in the longer term; co-location was more problematic among the shift-sharing schools than the site-sharing schools; and many of the schools involved took the opportunities afforded by co-location to review regular aspects of school processes, and to reconsider their particular relationships with their respective communities.

Jansen (2012) presented ideas about how leaders and organisations can function in “Rethinking organisations post-earthquake” – looking at self-organised group action. He describes self-organised groups as dynamic and organic compared to the more traditional and hierarchical structures of organisations, because self-organising groups tend to have decentralised control and shared leadership roles. This way of organizing action is arising in contexts that are complex, uncertain and littered with ambiguity, where people are dealing with unintended consequences of events or previous actions. Jansen suggests that it is possible for school leaders to be adaptive to change by use of mentoring, building positive, open relationships and shared values, and using distributed leadership and delegation. He states that following the 2010 and 2011 earthquakes “self-organisation became necessary as a lot of traditional power was decentralised and “rules” were relaxed.”

Duncan (2016) looked at the process surrounding the closure and merger of Christchurch schools, and the Government’s Shaping Education programme (2012) that directed much of this decision-making. Based on interviews with principals, government officials and others, she found that there was a good deal of room for improvement in how this

process was planned and implemented. Duncan concludes that there were inconsistencies and inequities in the processes that impacted on schools and principals. She states, “respondents were disappointed with the speed in developing the 2012 strategy. Consultation began in May 2012 and the strategy was decided on and released in August-September 2012.”

69% of respondents in Duncan’s research felt that the Ministry of Education was less than fair in how it devised the 2012 strategy, 68% were not satisfied with the level of communication from the Ministry and 58% felt they were not provided with adequate resources to deal with the implications of the 2012 strategy. Duncan also refers to variations in the quality of communication and information provided to principals. This led to confusion and frustration for principals involved in the process. The support principals appointed by the CCPA to help those principals directly affected by merger and closure processes was underlined as a successful step taken.

In 2013, the Education Review Office (ERO) produced a report based on the experiences of schools and early childhood centres in Greater Christchurch, that outlined how that had responded to the initial recovery phases of the post-disaster setting. The introduction to this report noted:

Teachers found that getting children and young people back into learning helped to normalise the situation for children and their families. The school’s and service’s curriculum needed to be adapted to respond to the emotional and learning needs of their children and young people.

The report also quoted Professor Sir Peter Gluckman, Chief Science Advisor to the Prime Minister, as describing the experience “as chronic stress ... imposed by the ongoing human, economic and social costs of the earthquakes.” This layer of needs added a new dimension to school programmes and leadership in the years immediately following the 2010 and 2011 earthquakes. Principals success in making powerful connections across the school community, and how well they built professional capability, were identified as probable keys to how well they addressed the complexity of conditions that emerged in the post-earthquakes setting for their schools.

Section 5: Findings

This section presents the findings from the interviews I held with 10 principals and survey questionnaires gathered from another 10. The responses from the participating principals provide insights into what was foremost in the thinking of school leaders and their reactions to this post-disaster period. What I found is that this period of relentless change has had a significant impact on how principals led, their understanding of leadership, and has not surprisingly challenged them more than any other period in their leadership.

The study’s findings are presented in line with the questions asked:

Question 1: What factors most supported principals in their leadership roles?

Question 2: What have been the barriers to successful leadership?

Question 3: What lessons did principals learn about leadership from these experiences?

Question 4: What recommendations would principals make to others based on these experiences?

What factors most supported principals in their leadership roles?

Table 5.1 provides a summary of the factors that principals identified as supporting their leadership in the post disaster setting.

Table 5.1: Main factors identified as supporting leadership

Factors	Interviews	Questionnaire	Total
In-school colleagues; Board of Trustees	10	7	17
Mentor or appraiser	5	7	12
Principal networks	4	5	9
School Cluster links	2	4	6
Beliefs & Values	4	2	6
Prior experience	2	1	3

Source: Author

Relationships based on trust and with those who share similar leadership experiences dominated principals' responses. Most principals discussed the importance of being able to talk to people who they have known for some time and who understand the issues they were facing. Having a trusting relationship with board members and staff, mentors or appraisers, at least one principal colleague and other networks appears to have been a critical factor for many in how they succeeded in making sense of and coping with increasing demands, and the unexpected nature of a post-disaster context. As some principals commented:

I'm a connector.

(Relationships) It's the core to everything.

Your networks are more important than ever.

In-school support: The greatest support for principals came from within their own school – including from the senior leadership team and the board of trustees. 17 of the 20 principals referred directly to the valuable role colleagues played. This was exemplified in some responses –

I'm as good as the people around me.

I need everyone on board to be the best I can be.

Six principals made mention of the degree to which their board supported them, especially the relationship with the board chairperson. Some also referred to changes in the leadership structure that better supported and enabled their leadership, and fostered a more cohesive approach across the school. A cohesive senior leadership team was regularly mentioned as a feature that made life easier for the principal, enabling them to delegate, and to be supported in achieving agreed priorities. Several noted the benefits of appointing a key senior leader over this time, for instance one who filled a void with curriculum leadership or for overseeing day-to-day operations. Sometimes this new appointment helped to get the leadership team on the same page. Principals were then in a better place to deal with the multiple demands arising from the 2010 and 2011 earthquakes, such as the rebuild programme, consultation with the community and across the sector, new school cluster arrangements, establishing enrolment zones and addressing staff wellbeing issues.

Mentors and appraisers: The provision of support from a mentor or appraiser was identified by just over 50% of principals as a key feature of support that helped them to unpack issues and to have someone as a sounding board for ideas or problem solving. A mentor was someone who could also offer relatively independent advice from a broader perspective than in-school colleagues. The Ministry of Education and the Canterbury Primary Principals Association made provision for a principal mentor role in 2013 to support Greater Christchurch principals. It remains in place in 2016. This role provides confidential leadership support. Former experienced principals from the Christchurch area undertake the mentor role. Mentors came from a variety of sources and were regularly said to have been a great form of support for successful principal leadership.

Networks: Nine principals referred to their own network of fellow principals who provided a forum for sharing ideas, and to compare experiences in real time as this context was unfolding, as contributing to successful leadership. This included regarding working with Government agencies, managing the complexities of the rebuild programme and sector changes, and addressing day-to-day challenges.

School clusters: School cluster arrangements also featured as a source for support and for generating solutions to problems being faced, as well as for implementing across-school projects. Christchurch schools entered into new school cluster arrangements following the 2010 and 2011 earthquakes. This was as a result of a Government initiative that set up a formal Learning Community Cluster structure. Some of these arrangements changed previous links between local schools, however many reinforced existing relationships.

Beliefs and values: About one third of participants discussed the importance of knowing what you stand for – being clear about what you believe and what values guide you. Principals said that knowing these beliefs and values supported their leadership. Having a strong sense of your beliefs and what could be defined as a clear moral purpose was evidenced in comments such as –

My values and leadership style have served me well.

Know what type of a leader you are.

Know yourself and stick to your values.

Prior experience: Although only three principals directly referred to the impact of prior experiences, comments in answer to all questions showed that where principals had come from, and what they had done previously, helped to shape how they led their school in this context, how they approached problems and where they went for support.

One referred to their previous involvement in a School Improvement project in another part of New Zealand, another spoke about the diversity of schools that they had been principal of and how this deepened their knowledge and experience, while a third revealed that their years of experience had taught them to say when they don't know something and to recognise when it's time to shelve an idea or initiative. As one principal succinctly put it:

Every step I've taken before now helped me.

Other factors: Three referred to the support of their spouse and family as being crucial for them:

An understanding spouse is essential!

Others noted the importance of a balanced life to help get through extraordinary demands:

Find balance in your life or you'll burnout.

Three principals spoke about seizing the moment. They noted the opportunity that was offered to them by circumstance, that might not otherwise have been the case, (for example, being appointed to replace a long standing principal or being appointed when a school was in some state of crisis). This gave them permission to make changes to systems or practices more easily than might otherwise have been the case. This was also noted by two principals who were leading a merged school structure, where this circumstance provided permission to start afresh with new staff arrangements or leadership structures, (although this also presented them with some notable challenges).

Other supportive factors that made a difference for principals included:

- use of a government agency to address division in their community about direction being pursued;
- completing a Diploma in Leadership;

- guidance provided by the KLP model;
- attending a conference on Positive Schools;
- a sabbatical period in 2014;
- visiting other schools and principals;
- employing a personal assistant;
- having staff stability; and
- working with an effective senior adviser from the Ministry of Education.

What have been the barriers to successful leadership?

Table 5.2 provides a summary of the issues identified by principals in this research as being barriers to successful leadership in a post disaster setting.

Table 5.2: Main factors identified as barriers for leadership

Barriers	Interviews	Questionnaire	Total
Unrealistic expectations	8	7	15
Workload	7	5	12
Compromised wellbeing	6	5	11
CSR (rebuild) programme	7	4	11
Heightened behaviour needs	4	6	10
Earthquake impacts – direct and indirect	4	5	9

Source: Author.

Principals described how multiple demands, poor external decision-making or policy implementation, increased workload, staff and student wellbeing needs, the CSR programme, unprecedented children’s developmental needs and specific impacts resulting from the 2010 and 2011 earthquakes, have all challenged their leadership in recent years, and have at times been barriers to successful leadership. Some have found themselves stretched beyond capacity in these years. The wellbeing of principals was mentioned as a concern for several principals in this study. As one noted:

Change takes on a life of its own.

Unrealistic expectations: Five principals were concerned about poor understanding and unrealistic expectations of the role of principals in a context of multiple, complex demands. They challenged the expectation held by some that principals will be involved in everything in their school development and regular operations. What might be a laudable goal in normal times was seen as unrealistic in a post-disaster setting. Most principals referred to the

challenge they faced in meeting a range of unexpected and ongoing demands, in what was an already extraordinary context.

The 2010 and 2011 earthquakes and their aftermath, and ensuing government decisions, particularly those made by the Ministry of Education, resulted in there being increased demands on principals and unrealistic expectations that the principals would lead each aspect of the different issues that schools were presented with. This was seen as a barrier to successful leadership because principals felt some pressure to participate in more than they felt able to. For instance:

The Ministry has an unrealistic expectation that principals will be involved in everything.

An already tough job gets tougher in a crisis.

For one principal, who was less than a year into the role, the proposal to merge with another school and be part of a new school building programme brought about dramatic change to the direction of school leadership. Their focus shifted from one about curriculum development and supporting teaching practice to one dominated by community disruption, managing dissatisfaction and division surrounding a merger proposal, and overseeing the formation of a new school, new staff team and culture, and the new building project that dominated this scene.

Workload: Increased workload was cited by 12 of 20 participants as a barrier to how well they performed. The workload that arose from late 2012, when the Minister of Education announced a set of school merger and closure proposals, was referred to by those principals directly involved as a game-changer. These changes were seen as barriers that became a stumbling block for successful leadership. One principal summed up how others felt in terms of challenges and frustrations:

I'm having to deal with an increasing number of things outside my control.

Principals' stated that a merger and closure proposal was a key moment in a crisis setting that drew them away from providing leadership of teaching and learning in their school for over six months. This was at a time when demands on staff wellbeing and children's developmental needs were peaking. Principals and staff were also faced with seeking support for families in crisis and for parents whose wellbeing was suffering.

The earthquakes caused me to change my leadership approach.

Very few principals across the city could avoid some impact from the changes that unfolded from late 2012, for example from merger-closure proposals, new school cluster formations, the blanket introduction of a modern learning policy preference by Government or the schools' rebuilding programme. Business as usual was not an option for any principal. Some events or decisions compounded the demands on principals. For example, the payroll crisis that unfolded in 2012-2013 around the nationwide Novopay system, the rapid roll-out of education change in Greater Christchurch, the complexities of consultation (that saw schools expected to contribute to various subjects such as special education, technology and provision for Year 7-8 children), added to principal workload. The 2014 decile reviews across the city added clutter to an already crowded leadership challenge. Principals commented that some Government decisions seem to have been made without adequate consideration of the Greater Christchurch context.

Compromised wellbeing: Staff related needs also challenged principals in the Greater Christchurch context. Many referred to the increased need to monitor and respond to staff wellbeing concerns. This included needs arising from housing pressures, earthquake repair schedules, anxiety-related conditions and personal relationship stresses. Other staffing issues raised included disagreement among staff, bringing new staff groups together in a new or merged school, and some staff disunity. Principals' own several principals identified wellbeing as a concern. Dealing with and supporting wellbeing needs was seen as a barrier to leading successfully.

CSR programme: Actions and decision-making surrounding the Christchurch Schools Renewal programme and its associated property services were a challenge for most principals. Over half of the participants in this study had direct concerns about how well the property developments were managed. Time delays, ongoing changes in Ministry staff they were dealing with and poor communication dominated their responses. Given that this programme took most principals well outside their area of knowledge, expertise and experience (from teaching and learning to school rebuilding) and did so at a time of other extraordinary demands, then principals required support mechanisms of a high standard. Without this some principals expressed frustration with how the CSR programme impacted on them.

A consistent message coming from respondents was that: “information sharing on what was available and how to access it was lacking.” A few principals stated that they accessed help while other schools didn’t because some principals didn’t know what to ask for.

We were told that our students would not be disadvantaged.

Inequity in Government decision-making was a theme that came through from a few principals. Some referred to close relationships between board members and government officials and/or politicians that in their view enabled them to have problems more effectively or promptly dealt with, while others felt they had to make a lot of noise to be heard. As one noted:

I’m seeing better things in 2015 but I’ve had to jump up and down to get there.

Heightened needs: Other Government agency provisions that caused concern and challenged principals’ leadership included support for children with significant special needs, especially the increase arising from earthquake-related impacts. Half the participants referred to children’s behaviour, emotional, mental health and other developmental needs as a large factor in the demands they and staff faced. Many principals referred to statistics from the local Health Board, media articles about increased waiting times for mental health services and local university studies as evidence that the needs of children had shifted significantly in the post-disaster setting.

In their view, the level of response to deal with these needs had not been sufficient. Existing problems were accentuated and in many cases schools were left to cope as best they could. This lack of adequate support at times impacted on principals’ ability to show leadership with regards to creating safe environments conducive for teaching and learning.

Other challenges: mentioned by principals included:

- Being in a “holding pattern” while a merger or closure arrangement was finalised;
- Unprecedented roll increases;
- New Health and Safety requirements;
- Loss of Government funding from decile recalculations;
- Poor coordination between helping agencies; and
- Failing support networks as existing clusters fragmented from 2013.

What lessons did principals learn about leadership from these experiences?

Table 5.3 provides a clear indication about what principals identified as significant shifts that they’ve made in their leadership, and what they’ve both learned about and relied on more in their approach to leadership. It indicates that this context has caused leaders to look more closely at their interpersonal skills, their beliefs and values, their ability to delegate, and what approaches to their leadership work best. Three-quarters of principals expressed the view that they had changed their leadership style or approach in some way, as a result of the post-disaster context they found themselves in.

Table 5.3: Lessons learned about leadership

Lessons	Interviews	Questionnaire	Total
Interpersonal skills	7	9	16
“I’ve changed”	7	8	15
Conscious leadership	6	7	13
Beliefs and values	6	5	11
Delegation	5	6	11
Other influences	3	7	10

Source: Author.

Interpersonal skills; being connected: Strengthening relationships with others, better interpersonal skills, working more closely with others and considering the wellbeing of those around them were seen as stronger aspects of most principals’ leadership. Sixteen respondents identified interpersonal skills as a major factor in their leadership, especially in relation to how they involved and looked out for their staff during this period of change:

I’m more relational, mobile and visible now.

I monitor people’s wellbeing more now.

Get relationships right and people will forgive your mistakes.

I know my staff better.

Principals stated that they have always relied on effective interpersonal skills to lead successfully. However this had become even more critical in a period of ongoing, unexpected and extraordinary change, and the demands that they found themselves dealing with. A few principals apologised for repeating a cliché (“It’s all about relationships!”), but they reiterated

that effective relationships with key stakeholders in your school community were at the heart of success in this context.

I'm more conscious of how people handle change differently.

Our focus shifted to wellbeing in 2011.

I model and coach what I want to see from others.

Find that balance between change and consolidation.

“I’ve changed”: Nearly all participants recognised that they had changed intentionally or unintentionally because of the circumstances they found themselves in. They referred to ways that they had changed and adapted in how they led their schools. No one had stood still or maintained their “business as usual” stance:

My focus has changed.

I've moved from doing things right to doing the right things.

I'm more of a risk taker than I thought I was!

Other comments that reveal a theme of increased leadership self-awareness, especially in a time of extensive change, include:

I can't know everything!

I'm less trusting and more cautious.

Conscious leadership: The theme of “conscious leadership,” being leadership that is built on reflective practice, strong interpersonal skills and a definite sense of purpose, was dominant in how principals described what they had learned about leadership. This was explained by participants in terms of knowing more about themselves, being clear on the goals they were pursuing and learning more about how they practise leadership. It included reference to the concept of moral purpose, to being intuitive and to being realistic about where you stand.

Know when to say I don't know.

We kept a strong link to our school priorities.

I really enjoy being reflective, doing future focused inquiry.

Maintain a no surprises approach.

Beliefs and values: A strong sense of what you stand for, your moral purpose, was given prominence by some principals in their responses. The lessons they had learned about their beliefs and values included:

Be adaptable but still be connected to your values and beliefs.

I rely on long held values.

We're here for all the kids.

Remember, what you're doing is important.

Some principals described emerging self-belief about their leadership:

I do know what to do!

I rely a lot on my gut; how things feel to me.

Finally, beliefs and values were captured well by another principal who stated:

Ensure decisions are made in the best interest of the whole community.

Delegation: A greater focus on delegation and “letting go” was a significant shift that many principals identified:

It's not something I've done well in the past.

This was a message echoed by over half the principals. Principals recognised that they couldn't do all that was being demanded of them in this time. They also recognised that effective leadership can occur through others.

Being able to let things go, to delegate to others has been my biggest shift.

I try to empower others more.

I'm as good as the people around me.

Other lessons that a few principals cited regarding shifts in their leadership included, the importance of professional development and learning they gained from particular conferences or seminars and other opportunities, especially as this related to their immediate context and issues surrounding change:

The trip to Melbourne schools energised me.

My sabbatical in 2014 allowed me some good thinking time.

That experience (on a school improvement project) served me well.

I got a lot from my diploma course in leadership.

What recommendations would principals make based on these experiences?

Based on what principals said contributed to successful leadership, the barriers they were faced with and the lessons learned, principals were asked to make recommendations to other principals and leaders who may find themselves in similar post disaster or crisis circumstances. While some recommendations were made to other principals, some were directed at Government.

Conscious leadership: A key recommendation made by principals was for leaders in a post disaster setting to be conscious leaders. For these principals, conscious leadership speaks to clear, well-informed decision-making, to increased self-awareness, to being alert to the impact of change and decisions on others. It reminds us of the need to know where we stand and why, and of the competing demands that can draw leaders away from your main reason for being a leader. As some principals stated:

Can you draw a line back to your core vision?

Be clear why you became principal.

Participants also spoke of the need for principals in an ever-changing environment to allow themselves to take safe risks, and to not discount the importance of every small step

taken over time in your leadership. Principals were urged to continually manage change and find the balance between allowing sufficient time to embed initiatives already underway, before introducing further changes, especially in a setting where externally led change was prevalent. Relevant comments included:

I've made some good mistakes!

Innovation often comes out of bravery.

There are a lot of small things that we did that seemed insignificant at the time but did make a huge difference long term.

Find that balance between change and consolidation.

Keep moving, don't stagnate.

Two principals cautioned about the rate of change and the possible fragmentation that can come from moving too quickly, where part of the staff or school systems arrive in a different place to others:

Take care with the pace of change not to open up two schools.

Take time to learn about how change unfolds for others.

Other principals noted the need for good information sharing around decision-making, for example:

Provide as much information as possible

Ensure decisions are made in the best interest of the whole community.

Get different voices in the room.

Delegation: As mentioned earlier in this section, delegating responsibilities and sharing leadership were seen as essential by most principals. With multiple demands and unrealistic expectations on principals, a core lesson learned was the importance of delegating to others. This was very succinctly summed up:

Collaborate and distribute!

Don't be afraid to let others do things for you.

Involve people more in the process of how we're getting there.

Ministry of Education: Principals' responses indicated that they were seeking greater coherence from the Ministry of Education – both nationally and locally, especially in relation to the Christchurch Schools Renewal programme. In their view “the goal posts kept changing” in relation to decision-making, and for many, time delays were frustrating. Changes in key Ministry personnel also impacted negatively, as did the one-size fits all response from some key decisions. Some recommendations from principals included:

We're delivering personalised learning for our staff and kids. The Ministry needs to be doing this for us in our contexts.

To truly know you need to spend time in schools, see a typical day for a principal.

Send advisors out to work for a day or two in our schools.

Come into our schools and walk in our footsteps.

A shared concern for several principals was how well all Government officials understood the reality for schools and school leaders as the post-disaster context unfolded. Some professional learning providers also seemed to work under the misunderstanding that principals would be at the centre of their project or programme. The concept of principals as “leaders of learning” in their schools needs to be better understood, in terms of the extent to which principals are expected to actively participate in school-wide initiatives in an extraordinary setting. Much can be achieved through distributed leadership practices and delegated roles.

Mentoring: The Ministry of Education made available one full-time equivalent mentor role, in cooperation with the Canterbury Primary Principals Association, to help support principals in Christchurch from 2013. A significant number of principals felt this was a great initiative that supported successful leadership. Principals recommended that more mentors be made available to support principals as the Christchurch context continues to unfold.

Other comments: Principals also suggested improved follow up meetings or reviews, especially by the Ministry's Special Education and Property sections, to help monitor how effectively support was occurring for schools. Standard practice does not gain much traction in the extraordinary setting that principals felt they were in. Closer monitoring was therefore seen as valuable.

SECTION 6: Discussion and conclusion

Those who stand for nothing will fall for anything.

- A. Hamilton

This study's aim was to examine the leadership experiences of principals in Greater Christchurch's post disaster setting resulting from the 2010 and 2011 earthquakes, and to document some lessons learned in this setting. There hasn't been one set of experiences in the Greater Christchurch schools context. However there are common themes, such as the central role of relationships, moral purpose and adaptive expertise for successful leadership, that have been identified in previous research and that have been raised by participants in this study. This section provides discussion on the findings in Section 5 of this study and previous research. It also provides a conclusion to this study.

Factors that most supported principals in their leadership roles

Based on this study's findings, the keys to successful school leadership in this post-disaster context, appear to centre on: connected leadership that establishes strong support networks and collaborative professional relationships; conscious leadership, that holds a clear sense of moral purpose and self-awareness, and adaptive expertise that responds accurately to a rapidly changing context, making best use of previously acquired knowledge and skills.

Connected leadership

Find people who you relate well to. Find a mentor or a group that offers regular support.

A core message from participants in this study is don't act alone - seek advice, be open to new ideas, delegate and build partnerships.

Connected leadership includes the way that a leader reaches out to others and is welcoming of invitations to participate with others. These connections have a clear focus on school improvement and improved leadership performance. Connected leadership nurtures and makes the most of productive relationships with all stakeholders, fosters other leaders

within a school, enables school leadership to occur through others, including via delegation, and actively builds networks outside the school that support problem solving and decision-making. Connected leadership also contributes to a wider education community.

Connected leadership is the most dominant feature that emerged in the findings of this study. It can be seen as a vital factor that supports principals in dealing with the extraordinary. When participants in this study referred to the importance of principal networks, collegial, mentor and other professional relationships, they were giving prominence to connections with others, in ways that supported leadership in a post disaster setting.

The findings of this study showed that principals tend to use multiple sources of support and seek out the ideas of others. Principals connected mostly with other principals or mentors who had prior leadership experience, rather than with those who had limited direct experience of school leadership.

Connected leadership as a contributor to successful leadership in this post disaster setting strongly endorses the Kiwi Leadership for Principals (2008) model. This model achieves close alignment between theory and reality, based as it is on experiences of New Zealand school leadership and development. The four dimensions of the KLPM - Culture, Pedagogy, Systems and Partnerships – all rely on effective relationships for success. From this study, we also find that securing and maintaining relationships was at the forefront of principals' practice, especially in helping address the multiple unexpected demands that many principals faced. Partnerships and external networks were cited as crucial forms of support for sustaining leadership and development.

Three main reasons appear likely to account for the prominence of connections with others. The first is that connections with other principals and mentors would be more likely to offer realistic, jargon-free guidance, with feet firmly planted in school life, and with knowledge of the complexity of multiple relationships across diverse groups. It would appear that for some principals the importance of ensuring “that others participate in a shared direction via distributed leadership” and the knowledge that schools affect one another “in webs of mutual influence” (Hargreaves and Fink, 2004) were also important in shaping how they fostered relationships in this post disaster setting.

The second reason appears to be that connections with in-school colleagues and boards of trustees were intended to use local knowledge and locate control for actions and decisions within the school itself. I got the impression from talking to principals that it was not always easy to delegate, and that they had to first recognise the need to let go of some direct leadership roles. In doing so, this revealed how effectively the principal could influence others through their leadership style, shared moral purpose and clarity of leadership. The capacity to motivate, persuade and nudge others in the right direction seems to have been crucial.

The third reason that drove connections is that principals connected in order to ensure school improvement and sustainable leadership. The findings of this study align strongly with previous research on the importance of effective relationships in achieving sustainable leadership and school improvement (Mitchell, 2002; Hargreaves & Fink 2004, and Boyd, 2012). It became clear to principals in this study that they couldn't walk this path alone. Their response to a growing workload was to reach out. They sought a range of perspectives and networks to openly share ideas and experiences, and to better locate their own leadership in this extraordinary context.

Jansen's (2012) description of self-organisation in the Greater Christchurch post-disaster context also links well with the findings of this study. The factors he highlights regarding mentoring, distributed leadership, interactions and setting shared values are all closely aligned with the concept of connected leadership. The experiences of school leaders in this study adds weight to Jansen's views about how organic forms of organisation can emerge in such times.

Conscious leadership and moral purpose

Conscious leadership and moral purpose were also key findings in relation to factors that contribute to successful leadership. Principals did not necessarily talk directly about conscious leadership or moral purpose. It was in responding to the four study questions overall, particularly during the interview process, that the two emerged.

Being a conscious leader incorporates reflective practice, being open to learn, having the capacity to learn from experience and a heightened level of self-awareness across all aspects of your work. Know who you are, what you can and can't control, know what you stand for, and then go and stand up for it, were views expressed by participants in this study. Two

key practices of conscious leadership emerge strongly here. Firstly, principals sought out professional links beyond their own school and contributed to networks or cluster arrangements. Principals appeared to be taking this step in order to broaden their perspective on the changes they were experiencing and to gain both fresh ideas and support. This then contributed to their capacity to lead within a heightened period of change. As Fullan (2002) noted, “knowledge creation and sharing fuels moral purpose.” Principals were better enabled to act with clarity (moral purpose) and depth of knowledge because of the links they forged.

Secondly, they maintained a strong link to their intuition, to what they believed and to what one described as their “gut feel.” It seems that in a sea of change principals needed to anchor their thoughts and decisions to something certain. This aligns with what other research says about having a strong moral purpose and being clear on what you stand for.

The idea of being a conscious leader – with the compelling need to act in a way that determines the schools future, not in a way that lets circumstance or other forces determine them for you, was prominent in what principals talked about in this study. It was evident in their responses to the study questions that they were determined to get the best outcomes for their school and its learners within a fluid, complex setting. This included knowing more about themselves (*“I’m more of a risk taker than I thought I was!”*) being clear on the goals they were pursuing (*“We kept a strong link to our school priorities”* and *“Can you draw a line back to your core vision?”*), learning more about being a leader (*“I wouldn’t recognise myself as the person who went to the First Time Principals course”*), being realistic about where you stand, (*“Know when to say I don’t know”*) and knowing those with whom you work (*“I’m more conscious of how people handle change differently”*).

By putting into practice conscious leadership, principals increasingly took into account the impacts of decisions made and actions taken. For example, some principals cautioned about the rate of change and the possible fragmentation that can come from moving too quickly, where part of the staff or school systems arrive in a different place to others (*“Take care with the pace of change not to open up two schools”* and *“take time to learn about how change unfolds for others”*, and *“Find that balance between change and consolidation”*). This setting provided a period during which professional learning was both put into practice, and acquired.

In relation to moral purpose, principals appear to have been successful leaders as they reaffirmed what they stood for, believed and valued. One principal in this study made the

statement that *“You need to be adaptable. But hold on to your values and beliefs.”* This is backed up in other research including Fullan (2002), Sergiovanni (1992), Stoll and Fink (1996) and the KLPM (2008). Coming through from the themes identified from this study was that moral purpose was not only about the principals and the schools they lead, but in line with Fullan (2002), was also about working with others to improve conditions in the wider school sector that principals operate in.

Adaptive leadership

“If the only tool you have is a hammer, you tend to see every problem as a nail.”

– Maslow

Boyd (2012) states: “Change in schools is a fragile endeavor that is influenced by many variables that exist within the individual system of each school as well as in the wider system which surrounds schools.” The complexities of leadership described by principals in this study, along with the complexities of rebuilding a city and its communities, align with Boyd’s beliefs about the fragility of change and the challenges that surround leadership. The ability to apply what you have learned from your experiences over time, to learn new ways of thinking and working in a highly demanding, extraordinary setting, is possibly the most important determinant of success in the aftermath of the 2010 and 2011 earthquakes.

Being able to transfer knowledge and skills learned or developed in one setting to help achieve success in another is a sign of successful adaptive leadership. Adaptive expertise (Timperley, 2009; OECD 2010) encompasses a range of thought processes, personality traits and dispositions. Rapid change in our schools, and the impact of social and technological changes in the world around them, has had and is having a significant effect on principals’ leadership directions and practices. The concept of “adaptive expertise” has emerged as a key factor for successful leadership. The capacity to adapt, to transfer learning from one context to another, to problem solve and to be more aware of the impact of your own actions appears to have been a crucial aspect of successful leadership in a post disaster setting.

When talking to the principals it became clear that many drew on past experience and expertise to manage the quickly evolving dynamics of school leadership in a post disaster setting. Past experience, knowledge and expertise appear to have been drawn on when trying to solve complex problems, and make important decisions. While the importance of connecting

with other leaders or delegating may appear to be something that anyone should and could do at any time, the use of resources within schools and the time to make meaningful connections with others during such a busy period were indicators of principals adapting to their new context and using new ways of working and connecting to ensure successful leadership. While past experience and prior knowledge were useful in responding to new demands, principals appear to have also learned from their peers' experiences and adapted this knowledge to use within their own schools. An example of this would be the awareness of what had happened with the CSR programme in other schools that then led to principals being aware of the issues that would face them, and how to prepare for this within their own setting.

A crucial factor of adaptive expertise in a crisis context seems to be well summed up by Elmore, in Fullan (2002): "What's missing in this view [focusing on talented individuals] is any recognition that improvement is more a function of learning to do the right thing in the setting where you work." One principal talked about putting into practice the principle of not always doing the right thing, but being able to recognize the times when it was more important to do what is right for this place.

This post-disaster context has provided an experience in which all those involved in schools and the education system had to learn to do things differently. Adaptive expertise was required in learning what the right thing to do was in a post disaster setting.

Barriers to successful leadership

For most principals, this period presented unprecedented challenges. Principals' comments in this study indicate that many found themselves stretched and at times struggled to cope with the extent of change, how well it was being externally initiated and the protracted nature of the changes being experienced. As one principal aptly stated:

My head is always full!

Principals referred regularly to the impact of unrealistic expectations and workload on their capacity to lead in this setting. Most reported that an increasing workload was a hindrance to effectiveness, especially when the source of that workload was externally driven. Some external providers of support for schools, for example providers of professional learning

programmes, did not adjust their expectations of the principals' role in school developments, to recognise the increasing demands that were unfolding for principals from 2012 to 2013.

Of all the challenges that principals faced in terms of increased workload, the implementation of the CSR programme was a critical factor that appears to have hindered principals' overall school leadership as it drew on significant resources, not only for the principal but also for school boards and senior leadership teams. The school rebuilding programme provided a new set of challenges for many principals, firstly in the new territory that some principals found themselves thrust into (e.g. managing aspects of a whole school rebuilding programme) and secondly when the programme was not well implemented, leading to frustrations for principals with communication lapses, time delays and what was seen as poor process.

The impact of multiple demands meant that not only did many principals feel overloaded but they also reported that their and their colleagues' wellbeing suffered. The negative impacts of workload are regularly referred to in the literature and other research as working against effective and transformational leadership. As Hargreaves and Fink (2004) posited, "In the end, leadership can be sustainable only if it sustains leaders themselves." They also made it clear that "sustainable leadership cannot be left to individuals, however talented or dedicated they are. If we want change to matter, and to last, then the systems in which leaders do their work must make sustainability (of leadership) a priority."

Callaghan (2013) found that principals in Christchurch were drained and suffering from low morale as a result of the demands and uncertainty that many were facing at that time. The NZCER study (2002) regarding school improvement stated, "The workload of principals was seen as a barrier to school improvement, especially for principals in low decile, rural, and small schools."

This echoes the concerns about the workload experienced by principals over the past three to four years in Greater Christchurch as being barriers to successful leadership. Principals have been engulfed in a wave of change and developments across Greater Christchurch. The expectation on principals needs to adjust in times of crisis or in an extraordinary context. Workload was highlighted in Duncan's (2016) report regarding the impact of the school merger and closure process, and by Callaghan (2013). Speed of decision-making, variation in quality of communication, and information overload were all raised by

principals in this study, in close alignment with Duncan's findings. The voices of principals in this study regarding workload and wellbeing have to be carefully considered, especially as more schools shift towards the "Community of Learning" model preferred by Government.

As Hargreaves and Fink (2004) noted, "Teachers and school leaders who are burned out by excessive demands and diminishing resources have neither the physical energy nor the emotional capacity to develop professional learning communities." If the transformational change that the education system is seeking is to be successful and sustained, then principals need to be well supported in line with the findings of this study, and in line with what Mitchell (2002), Fullan (2002), the Kiwi Leadership for Principals Model and others tell us about successful, sustainable leadership.

The direct impacts of the 2010 and 2011 earthquakes shifted principals' focus and provided a new level of demand for school leadership. This was especially true for those principals whose schools were involved in co-location arrangements with another school, for those whose schools were involved in merger and closure proposals (refer Duncan 2016), and for those schools that were either eventually closed or merged with another school or schools. The social and emotional needs of families, children and staff were another significant layer that most principals in this study made reference to, in regard to new challenges being faced in their leadership.

Lessons learned about leadership

From the findings of this study, we can conclude that this period of school leadership has provided principals with a wide range of experiences in which they have been tested and from which they have learned a great deal.

Principals have learned more about the power of effective relationships, they have learned much about how people experience and respond to change, they have learned how to let go and delegate. Principals have learned to clarify what they stand for and to consciously stand up for it. Some stated that they have learned to be wary and less trusting, especially when caught up in systemic change processes. Above all they learned to adapt.

Nearly all referred to what they had learned about themselves. Most indicated that they had changed to some extent in their leadership approach, in relation to what they focused on in

leadership, and about how they personally approached being a leader, especially in a context of ongoing change. This included understanding more about how change unfolds across a school organisation and across the sector, and learning more about their approach to taking risks.

Principals learning during this post-disaster setting included recognising their own limitations (*"I've made some good mistakes" or "I can tell you what not to do."*) Most importantly principals learned about the need to delegate and share leadership roles. Their comments about increased delegation and "letting go" seems to indicate that most were accepting of the fact that there was a limit to their capacity to manage what was being asked of them in this post-disaster setting. Some principals came to realise that not only couldn't they know everything in such an extraordinary context, they also had to avoid claiming to know more than they did. Some made break-through moments that reassured them about leadership (*"I do know what to do!"*).

Self-improvement was also evident in terms of lessons learned for principals in this study. This included undertaking a post-graduate diploma, taking a sabbatical to explore the experiences of other schools and contexts, the regular use of a mentor, attending conferences, finding time for professional reading and engaging in future focused inquiry. While the principals who were able to go through these professional development processes benefited greatly from what they learned, the demands on principals meant that it was a challenge to pursue new learning and formal professional development in this period. It is a testament to principals' levels of commitment that many still did.

What was surprising?

I was surprised to find very limited mention of some key sector organisations such as the New Zealand Education Institute (NZEI), a union for teachers and principals, and the New Zealand Principals Federation (NZPF), the organisation that represents primary school principals. The reasons for this could have been because principals didn't see them as major sources of support for leadership in this setting because the principals sought collegial support from those who shared similar experiences. However I had expected some mention of their endeavours. These organisations may have worked at a national level to advocate for Greater Christchurch schools and principals. In addition, the School Trustees Association (STA) was conspicuous by its absence. Although this organisation is charged with supporting parent

trustees on school boards, it could have featured in the support mechanisms for principals. What steps did STA take to support school leadership, given that the principal's role is critical in advising and supporting boards of trustees?

It was also surprising to find that most principals gave prominence in their responses to the shift to greater delegation and the difficulty many felt in *"letting go."* This highlighted the need to adapt to the range of conditions that principals faced in their leadership. It also reflects just how much principals take on their own shoulders in normal times, how they like to keep things close, how much is expected of them and how this extraordinary context forced them to re-think their approach.

Attending conferences and seminars, working with consultants, reading academic publications and learning from external experts were seldom cited as significant factors that have supported principals' leadership during this period. There has been a range of advisers and seminars promoted related to leading change in the Greater Christchurch context over recent years. It is worth asking to what extent those preparing and presenting this information have understood what the principals' role actually looks like in a post-disaster setting, and how well they have targeted the best "next step" considerations for school leaders in this context.

No clear pattern emerged in terms of findings from male or female principals, or from schools in different parts of the city. Neither was there any marked difference between the kinds of issues raised by principals whose schools were in different socio-economic communities. Those affected by merger or closure proposals not surprisingly talked more about this in terms of the impact on their communities, staff members and their own workloads. This aligns with the findings in Duncan (2016) about this process.

Recommendations - sustaining the gains

Principals in this study have given a strong indication of what works and what helped them the most to achieve successful leadership. Other research supports these views.

Principals recommend a number of steps for other principals to consider in order for them to achieve success in an unexpected and protracted context of change. Firstly, know what you stand for. Be clear about your own beliefs and the vision and goals that direct the school organisation as a whole. Secondly, seek out networks and mentors that support your own

knowledge, understanding and wellbeing. Thirdly, delegate roles and responsibilities in order to strengthen school leadership and to better enable your own capacity to lead. Finally, monitor the pace and extent of change carefully, to help ensure cohesive school-wide development that is inclusive and not fragmented.

Effective problem solving skills and decision-making processes are essential in contexts such as those studied here. Principals in this study recommended that leaders need to act with clarity and confidence, and to recognise that doing nothing in such a context will still result in something unfolding under your feet. As one principal noted:

Innovation often comes out of bravery.

Problem solving and decision-making processes are tested as never before. There is a real challenge for Government to ensure it is being accurate and agile in its responses to school needs in a post-disaster setting. Principals recommended that government should make sure that it is closely monitoring the impact of its decisions and actions on the sector, especially on school leadership, and in turn on outcomes for learners. Government, sector groups, professional development providers, mentors and others need to focus their efforts on supporting leaders to develop and refine connected, conscious and adaptive leadership. They need to continue to get alongside principals, understand their experiences and roles in a post-disaster, and design responses accordingly. One way to do this is to ensure that the mentor relationships so valued by participants in this study are nurtured and supported for all principals. Another way is to help foster cohesive leadership team practices, and work with principals to ensure that systems that are likely to lead to a cohesive team approach amongst the school's leaders are put in place.

There is some evidence in 2015 and 2016 that better responsiveness to principals' needs is happening at the local Ministry of Education level. The findings of this study and the results of other research make a compelling case for ensuring that this response is widespread, consistent and includes Government decision-making nationally.

Conclusion

Socrates is often quoted as saying: “the unexamined life isn’t worth living.” If ever there was a time in New Zealand that was worth examining it’s here and now, in the aftermath of a substantial natural disaster, and the rebuild of a large, modern New Zealand city, its various communities and in all its human facets. The Education sector, especially schools, provides a rich source of learning in this regard. The obligation to learn needs to transcend political imperatives, election cycles and vested interests. It is too valuable an opportunity to be lost in those combative considerations.

Principals are used to order, to well-planned processes and to relatively predictable settings. It’s a requirement of good school leadership to plan well, monitor closely and respond effectively to changing conditions. The earthquake context and all that followed this series of natural disasters tested the place of orderly, planned development, and of business as usual practices, not only for principals.

The period of extraordinary change and demands is not over. As the Renewal Programme and related developments unfold, as Communities of Learning are establishing themselves, there will be significant challenges for another five years or more. The experiences of school leaders to date are worth exploring and understanding, to help support school leadership, both in Greater Christchurch and beyond. While there is extensive research available internationally about leadership generally, there is limited research about school leadership in a post-disaster setting.

The aim was to examine the leadership experiences of principals in Greater Christchurch’s post disaster setting resulting from the 2010 and 2011 earthquakes, and to document some lessons learned in this setting. This study has addressed and discussed some of these. However this study represents a relatively small sample of primary schools in the Greater Christchurch area. Part of the reason this sample size was limited, is due to my capacity working full-time as a school principal in Christchurch during this period.

More investigation needs to be done. Further work should be undertaken by Government and others to research and evaluate what’s worked and what hasn’t in this extraordinary setting in relation to school leadership. Government agencies need to investigate the impact of policy decisions and initiatives taken to support schooling and enhance

education, to ascertain to what extent this has been successful in this setting, and to identify where modifications could be made to support successful school leadership.

Leadership is a way of being. It's not a series of tasks done well. To be successful requires something beyond competencies. Success is fluid and incremental. It rests on the accuracy of one decision, on the quality of one conversation, on how well a leader communicates the "why" that underpins the "what." The capacity to connect well with others, to effectively adapt to changing conditions and to be relentlessly self-aware, forms the basis for successful leadership. These are demanded of school leaders more than ever during extraordinary times.

While leadership requires a wide range of attributes and knowledge, the key features of successful school leadership highlighted in this study have been connected leadership that accesses and maintains strong support networks and collaborative approaches, conscious leadership that holds a clear sense of purpose and self-awareness, adaptive leadership that responds effectively to a rapidly changing context, making best use of previously acquired knowledge and skills. The findings of this study tell principals to continue to firmly locate themselves within these realms of leadership. Each of these components needs to be applied in ways that matter. Connections need to be purposeful and productive to serve school priorities and valued outcomes. Conscious leadership needs to include an astute level of self-awareness and a heightened understanding of the influence of both micro and macro factors on school improvement. Adaptive leadership should concentrate on ensuring "right place, right time" decisions that also serve school priorities and goals. Sustainable leadership requires some key features to be in place. These features were prominent in the responses of participants in this study and are highlighted in literature (Mitchell et al, 2002).

Connected leadership, conscious leadership and adaptive leadership do not exist in isolation. There is an inter-play between them that results in the whole being greater than the sum of its parts. However they each need to be supported and nurtured both individually by principals, and collectively by networks of professionals, and by the education system as a whole. In order to achieve the best outcomes aspired for in the renewal of Christchurch schools and education, greater attention needs to be given to the concepts of sustainable leadership outlined above, and to policies and practices that support principals in Greater Christchurch over the next five years.

This study favours the view that school leaders don't need another idea, concept or model in a post-disaster context. Too many facilitators and consultants are all too ready to offer jargon-laden advice about how to lead, based on limited practical experience. Most principals need and seek proven knowledge, contextually responsive support and practical advice about how to implement effectively what is already known, from others who have shared experiences.

There is a great deal known already about what works well in a post-disaster or crisis setting, especially as it unfolds over time. This study highlights some of that learning. Success over the coming years will be determined in part by how well we have learned lessons from the last five. Let's celebrate the extraordinary achievements that have occurred across the sector in this city since the 2010 and 2011 earthquakes, and let's ultimately ensure that we learn the lessons that are waiting to be discovered.

Experience is not what happens to you. It is what you do with what happens to you.

- Aldous Huxley

References

- Boyd, S. (2012). Key messages about change in schools: A literature scan for Sport New Zealand. Wellington, New Zealand: Sport NZ, NZCER.
- Callaghan, C. (2013). *The Role of professional leaders in creating and maintaining school cultures in times of change*. Unpublished sabbatical report.
- Christchurch City Council (2011). *Share an Idea*. Retrieved from <https://www.ccc.govt.nz/the-rebuild/strategic-plans/share-an-idea/>
- Degenhardt, L., & Duignan, P. (2010). *Dancing on a shift carpet: Reinventing traditional schooling for the 21st century*. Camberwell, VIC: ACER Press.
- Duncan, J. (2016). *CPPA Inquiry into the Ministry of Education's post-earthquake response for education in Christchurch*. Christchurch, New Zealand: Canterbury Primary Principals Association.
- Education Review Office. (2013). *Stories of resilience and innovation in schools and early childhood services: Canterbury earthquakes 2010-2012*. Wellington, New Zealand: Education Review Office.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Fullan, M (2002). The change leader. *Educational Leadership*, 2002, 16-20.
- Fullan, M. (2002). *Principals as leaders in a culture of change*. Ontario Institute for Studies in Education University of Toronto. Paper prepared for Educational Leadership, Special Issue, May 2002.
- Ham, V., Cathro, G., Winter, M. & Winter, J. (2012). *Evaluative study of co-located schools established following the Christchurch earthquakes*. Christchurch, New Zealand: CORE Education.
- Hargreaves, A. & Fink D. (2004). The seven principles of sustainable leadership. *Educational Leadership*, 61(7), 8-13.
- Harris, C. (2013). School leadership in the changing demographic of Christchurch in 2013. *New Zealand Educational Administration & Leadership Society*, 2013, 4-5.
- Jansen, C. (2012). *Rethinking organisation post-earthquakes*. Seminar presentation. Retrieved from www.core-ed.org/about/.../chris-jansen-re-thinking-organisation-post-earthquakes
- Ministry of Education. (2008). *Kiwi Leadership for Principals: Principals as educational leaders*. Wellington, New Zealand: Ministry of Education.
- Mitchell, L. Cameron, M. & Wylie, C. (2002). *Sustaining school improvement: Ten primary schools' journeys*. Wellington, New Zealand: NZCER
- Organisation of Economic Cooperation and Development (2010). The nature of learning: Using research to inspire practice. In H. Dumont, D. Istance, & F. Benavides, (Eds.), *The nature of learning: Using research to inspire practice*. OECD
- Robertson, J. (2016). You want teaching to make a difference – right? *NZ Principal*, June 2016, 29-31.

- Robertson, J. (2016). *Coaching leadership: Building educational leadership capacity through partnerships* (2nd ed.). Wellington, New Zealand: NZCER
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why*. Wellington, New Zealand: Ministry of Education.
- Sergiovanni, T. (1992). *Moral Leadership, Getting to the Heart of School Improvement*. San Francisco, CA: Jossey-Bass.
- Sergiovanni, T. (2000). *The lifeworld of leadership: Creating culture, community and personal meaning in our schools*. San Francisco, Jossey-Bass.
- Stoll, L. (1999). *Supporting School Improvement*. Paper presented to OECD conference, Combating Failure at School, 1998.
- Stoll, L. School Culture. (2000). *SET 3, 2000*. Wellington, New Zealand: NZCER.
- Stoll, L., & Fink, D. (1996). *Changing our schools: Linking school effectiveness and school improvement*. Buckingham, England: Open University Press.
- Timperley, H. (2009). *Using Evidence in the Classroom for Professional Learning*. Auckland, New Zealand: University of Auckland.
- Timperley, H. (2013). *Learning to practise*. A paper for discussion. Wellington, New Zealand: Ministry of Education.