

**System Learning in Complex and Emergent Environments: A study of
how leaders in one education system enabled capacity for learning
focused on the enactment of moral purpose.**

Submitted by

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Declaration

The thesis contains no material published elsewhere or extracted in whole or in part for a thesis by which I have qualified for or been awarded another degree or diploma.

No parts of this thesis have been submitted towards the award of any other degree or diploma in any other institution.

No other person's work has been used without due acknowledgement in the main text of the thesis.

All research procedures reported in the thesis received the approval of the Australian Catholic University Ethics Committee and the Catholic Education Office Melbourne.

Signed: _____ Date: _____

Jayne-Louise Collins

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Abstract

This thesis explores system capacity building, in particular, the purpose of system capacity building and how leaders, in the context of *Leading for Learning Project*, enabled *whole* of system capacity building with a focus on sustained engagement with moral purpose. It is argued, however, that the purpose and scope of system capacity building is often conceptually limited because it is understood within the current regulatory and performance focused education reform environment. This thesis, therefore, offers an alternative perspective by engaging with the theoretical underpinnings of complexity theory. As such, this thesis offers a conceptualisation of education systems as complex adaptive systems and system capacity building as a complex and emergent process. The thesis presents a radical reframing of education systems arguing that education systems are better understood as open, dynamic, and emergent systems, constituted of many interdependent relationships throughout the system.

It is this conceptual framing that has informed the exploration of the research question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

The specific context of this thesis is one education system and, in particular, the experiences of leaders in the professional learning project referred to as the *Leading for Learning Project*.

This research used an ethnographic methodology, situated within a relativist ontology and a subjective epistemology, and gave particular attention to the complexity of the education system and how meaning emerges as a consequence of the dynamic interactions between leaders across the multiple settings within and beyond the project context. A detailed thematic analysis process was used in this study providing opportunities for the continuous engagement with the experiences of leaders, and demonstrating a commitment to the diverse and complex understandings of their experiences and enactments of system capacity building. The analysis and interpretative phases of the study led to a series of interim findings and the subsequent identification of four key findings.

The four key findings of the study were interpreted in relation to the conceptual framework I developed from a synthesis of the literature in Chapter 3. The interpretation of the four key findings provided insight into the following:

1. The enactments of leadership that enable system capacity building.
2. The conditions of emergence enabled by these enactments of leadership.
3. The emergent behaviours that can be understood as expressions of system capacity building.

This is significant because the study not only provides insight into the particular enactments of leadership that enabled system capacity building, but also into the necessary conditions of emergence, and the subsequent behaviours that emerged within the education system. Collectively, these findings and insights provide a response to the research question focusing this study: How leaders in an education system develop system capacity to enable sustained engagement with moral purpose? In doing so the study not only offers an alternative conceptualisation of education systems and system capacity building, but also offers ways of understanding the practical implications of such a conceptualisation.

This study, by engaging with perspectives underpinned by complexity theory, is able to offer new possibilities for ways of thinking, working, learning, and being within education systems and how the capacities of leaders might be fully expressed and focused on the enactment of moral purpose.

Chapter 1

Introduction

This thesis explores system capacity building, in particular, the purpose of system capacity building and how leaders in education systems understand and enable system capacity building. Attention is given to ‘whole of system’ capacity building whereby those within education offices supporting schools *and* those within schools are connected and committed to learning for all, with a focus on enhancing student learning in their day to day work (Fullan, 2011a; Harris, 2010). However, as will be argued here, the purpose and scope of system capacity building is often conceptually limited because it is understood within the current regulatory and performance focused education reform environment. Hargreaves and Shirley (2009), Harris (2010), and Stoll (2009) are among those researchers calling for perspectives that offer alternative understandings of education systems and system capacity building that transcend the existing structures and mindsets of education reform. This thesis intends to address this call by describing an alternative perspective by which to understand system capacity building based upon the exploration of how leaders in one education system enabled system capacity building.

Specifically, this thesis examines the dynamics of system capacity building in the Catholic Education system in the Archdiocese of Melbourne by exploring the experiences of leaders in the context of a particular professional learning project – *Leading for Contemporary Learning in Catholic Schools*. This project provided a unique opportunity to explore how leaders enabled system capacity building; that is, how they enabled their own learning and the learning of each other, how this might be conceived as system capacity building.

Furthermore, this exploration of system capacity building is guided by the theoretical underpinnings of complexity theory. As such, this thesis offers a conceptualisation of the particular education system as a complex adaptive system, and system capacity building as a complex and emergent process, so as to provide insight into how leadership is experienced within such a complex and emergent environment, and how it is focused towards building the capacity of teachers, leaders in schools and education offices and,

ultimately, the system as a whole. By engaging with complexity theory this thesis is able to offer insight into the connected and relational ecology of the education system and how the capacities and potentials of the human person contribute to the emergent capacity of the system (Capra, 2002). It also provides insight into how a complexity ontology offers renewed perspectives on how complex human social systems might be understood and then represented within studies (Haggis, 2008). On both accounts this is significant, as this study has deliberately stepped out of the usual frames of reference, and engaged with a new and emerging organisational theory as a way of not only conceptualising education systems, but also as a way of understanding the practical implications of such a conceptualisation. While there is growing debate about how complexity theory might inform education research in the areas of, for example, pedagogical and curriculum practices (Mason, 2008; Morrison, 2008), this study is one of the few examples where education research, with a focus on system capacity building, has been informed by complexity theory. This claim is supported by researchers such as Jäppinen (2014), who suggests complexity research is still uncommon in education, Snyder (2013), who comments on the necessity of understanding education systems as complex ecosystems if they are to be adaptive in changing environments, and Goldspink (2007b), whose research is identified as a rare example of complexity principles used in education reform.

1.1 The Research Purpose and Question

The purpose of this research is to provide a deeper understanding of system capacity building, and how leaders enable system capacity building, by exploring the experiences of leaders in one education system, the Catholic education system in the Archdiocese of Melbourne (to be referred to in future as the Catholic Education System Melbourne (CESM)), in the context of a particular professional learning project *Leading for Contemporary Learning in Catholic Schools*. Moreover, this exploration was guided by the theoretical underpinnings of complexity theory, in particular, the principles of complex adaptive systems. As such, the following research question guided this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

The ensuing sections provide a justification for this research purpose and its guiding research question, by describing the following five prevalent considerations or issues.

First, a number of important terms are defined in relation to this particular research. Then, under the section *Identifying the Research Problem*, a description of the broader education system context in which this particular professional learning project was situated is provided, since this influenced the nature and purpose of the project. Next, a brief description is given of how the research problem was identified from the unique experiences within a particular professional learning project, *Leading for Contemporary Learning in Catholic Schools* (to be referred to in the future as the *Leading for Learning Project*). Fourth, a description of my personal experiences within this education system and this project are provided, so as to inform, not only my level of involvement in the project, but also my stance as researcher. Finally, an introduction to the scholarly literature in which the study is situated is offered.

1.1.1 Defining key terms.

The following key terms are defined as working definitions, not with the intention of restricting meaning, but to provide clarity about how they will be used in this, and subsequent chapters.

The term *moral purpose* is used to describe purposes of education that are focused on the learner and how he/she grows into the fullness of their unique humanity. It is explicitly centred on the care for each human person (Starratt, 2007).

The term *capacity* is understood in the literature as the potential to engage in and sustain activities towards a particular purpose (Stoll, 2009).

The term *capacity building* is described as actions that enable the potential for sustained engagement towards a particular purpose (Fullan, 2004b; Stoll, 2009). In this thesis, these actions are understood as being focused on learning.

The term *education system* refers to the *whole* of the education system, and includes the schools within the particular education system's jurisdiction, and the education offices or the bureaucracy that provides service to these schools. In this study the particular education system is referred to as the Catholic Education System, Melbourne (CESM).

The term *education office* refers to the work locations where the leaders who provide service to schools are based. In this study there is a central office location and four regional office locations, collectively referred to as the Catholic Education Office Melbourne (CEOM).

The term *leader* refers to those who exhibit qualities and practices enabling them to positively influence and enhance the learning culture of their educational setting (Hargreaves & Fink, 2006; Robinson, 2006).

The term *school leader* is used to refer to those in schools participating in the *Leading for Learning Project* and includes, for example, Principals, Learning and Teaching Leaders, Religious Education Leaders, and Teacher Leaders.

The term *education office leader* is used to refer to leaders from the education offices from across the education system, facilitating, and participating in, the *Leading for Learning Project*. This term refers to those with roles such as Education Officer, Project Officer, Manager, Advisor, and Consultant. At times, the term leader will be used to refer to school leaders and education office leaders, collectively.

All of these terms will be further defined and discussed in response to the review and synthesis of the literature in Chapters 2 and 3 of the Literature Review.

1.2 Identifying the Research Problem

1.2.1 Understanding the particular Catholic education system context.

The CESM is located in and around Melbourne, the capital city of the state of Victoria in Australia. The CESM includes the Catholic schools in the Archdiocese of Melbourne and the central and regional offices that support these schools. There is a central office located in Melbourne, and four regional offices, servicing a total area of 27 000 square kilometres, including urban, suburban, and rural environments. The location of

Melbourne, and the area of the CESM which is divided into four regions, is shown in Figure 1.1.

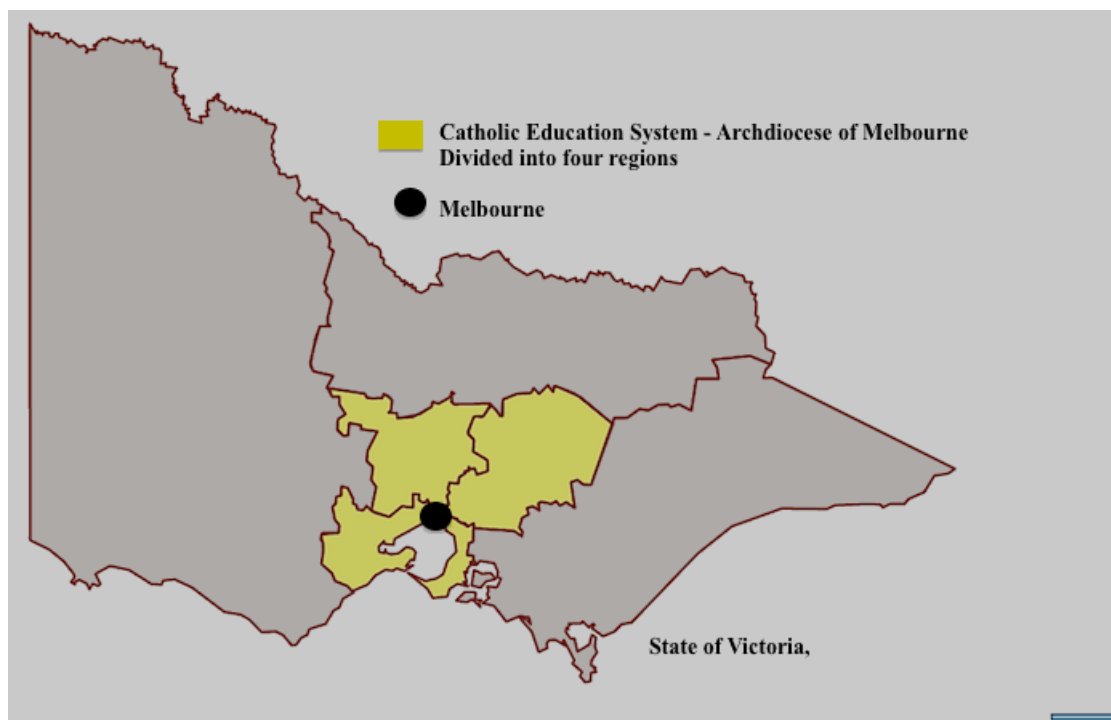


Figure 1.1 Catholic Education System, Archdiocese of Melbourne in the state of Victoria.

The central and four regional offices service 256 primary schools, 67 secondary schools, and 7 special schools. These schools collectively enrol approximately 140 000 students, supported by 13 000 teachers and non-teaching staff (CEOM, 2011b), and over 400 staff from the CEOM. This demographic makes the CESM the sixth-largest education system in Australia, in respect to student population.

The CEOM's mission is to work with Catholic educational communities to provide an outstanding Catholic education that integrates faith, life, and culture (CEOM, 2011a). The CEOM works in partnership with school communities to develop the whole person within a school environment centered on the person and teachings of Jesus Christ (CEOM, 2011a). One of the central activities of the CEOM that reflects a considerable investment of resources is the provision of professional learning opportunities to schools. In 2010, the CEOM offered a total of 528 Professional Learning Programs (CEOM, 2011b) including the *Leading for Learning Project*.

The *Leading for Learning Project* is underpinned by the CEOM policy document, *Learning Centred Schools, A Sacred Landscape*, which provides a clear articulation of the distinctive nature of learning and teaching in a Catholic School (CEOM 2009a). It seeks to enact a vision of learners who are free and responsible persons, capable of living a spiritual life in dialogue with God, and capable of engaging with Australian culture and contemporary society (CEOM 2009a). Through the curriculum and transformative pedagogies, those within the Catholic School seek to form a learner:

who is able to inquire about everything and everyone positively and with an open mind, inspired by a profound sense of humanity and by a connection with old and new stories that can open alternative worlds that can grant ...the Reign of God.
(Pollefeyt, 2006 as cited in CEOM, 2009a, p.5)

This policy context is explored through the findings identified from the *Enhancing Catholic School Identity Project* (Catholic Education Commission of Victoria, 2010), which brings attention to important questions about how leaders across the system contribute to, and participate in, identity formation of the learner, of leaders, and of the Catholic School within contemporary contexts (Pollefeyt & Bouwens, 2010). The CEOM promotes an expansive vision of learning grounded in a contemporary worldview and in dialogue with, and enriched by, the Christian narrative. It is a vision that offers both opportunity and challenge to all within the education system as they seek to enact such a purpose for education.

Given the considerable size and multifaceted structure of the CESM challenges arise as to how the *Leading for Learning Project* might be enacted. The project had a 'whole of system' focus, however complex questions arose as to:

- How 'whole of system' is understood when the education system seems to consist of separate entities across different teams and locations?
- How to lead for system change when, in reality, the system is large, messy, and unpredictable?
- How to understand leadership in the context of fluid teams across the system as a whole, particularly when leadership roles are embedded within traditional organisational structures and mindsets?

It is these kinds of challenges, and the way in which they were manifest in the context of the *Leading for Learning Project*, that gave rise to the research problem and provided the

impetus for this study. The following section provides a description of this particular project.

1.2.2 The *Leading for Contemporary Learning in Catholic Schools Project*.

The Leading for Learning Project, was an ambitious project in scope and size. Essentially its focus was on enhancing student learning through an exploration of curriculum design and pedagogy as informed by current understandings and research on enhancing Catholic school identity/ies in contemporary contexts (Pollefeyt & Bouwens, 2010). To this end, the design of the project centred upon developing the knowledge and capacities of leaders across the education system; the leaders within schools and the leaders within the education offices (Catholic Education Office Melbourne (CEOM), 2010b). There were three particular characteristics of the *Leading for Learning Project* that provided the impetus for this research. Each of these will now be addressed in turn.

1. The *Leading for Learning Project* was focused on inquiring into how the moral purpose of the education system might be enacted across the many dimensions of the system.

Generally, the *Leading for Learning Project* participant activities were framed around questions of inquiry and focused on understanding the distinctive nature of learning and teaching in a Catholic education setting. These questions were aligned with the three areas of: curriculum design and pedagogy in a Catholic context; collaborative and connected professional learning; and, enabling equitable and just futures for learners. For example, one overarching question was, “*How do leaders support the development of the identity of the learner through curriculum design and pedagogy in a Catholic context?*” (CEOM, 2011c). The intention of these questions was to invite schools to generate a collaborative process of inquiry that would enable them to explore and create new knowledge about the distinctive nature of curriculum design and pedagogy in a Catholic school. Each school team, as well as each education office team, initiated an action research project that was intended to progress their own knowledge and understanding, as well as contribute to the collective understanding of the system about how to enact the education system policy, *Learning Centred Schools: A Sacred Landscape*. For example, school teams developed questions, such as the following, to focus their projects: *How can we enact more inclusive, just, and equitable ways of learning (an examination of our pedagogy)?; How can we promote dialogue and reflection that fosters respectful way of working and*

learning together?; How can we develop a stronger and more consistent focus on data and evidence to reveal learner needs and in turn inform our practice?; How might we foster a strong sense of our Catholic identity through our curriculum designs? These kinds of questions, underpinned by the overarching project questions of inquiry, assumed that the outcomes of the project were the creation of an array of possible ways to translate the education system policy into practice that could be used across multiple settings.

2. The *Leading for Learning Project* was focused on enabling whole of system capacity building.

The implementation strategies of the *Leading for Learning Project* focused, not only on the learning of school teams, and the learning of their students, but also on the learning of education office leaders within the central and regional office locations. Education office leaders from the Learning and Teaching team and the Religious Education team, who were dispersed across the four regional office locations and the central office, engaged in a collaborative inquiry to inform their collective work and, in turn, their work with schools. In this way the intention of the project was to develop a connected model of capacity building across the whole education system so as to connect student learning not only with teacher and school leader learning and practice, but also with education office leader learning and practice (CEOM, 2010a; O'Rourke & Burrows, 2010). Figure 1.2 below presents the connected learning model by demonstrating the overall configuration of the *Leading for Learning Project*.

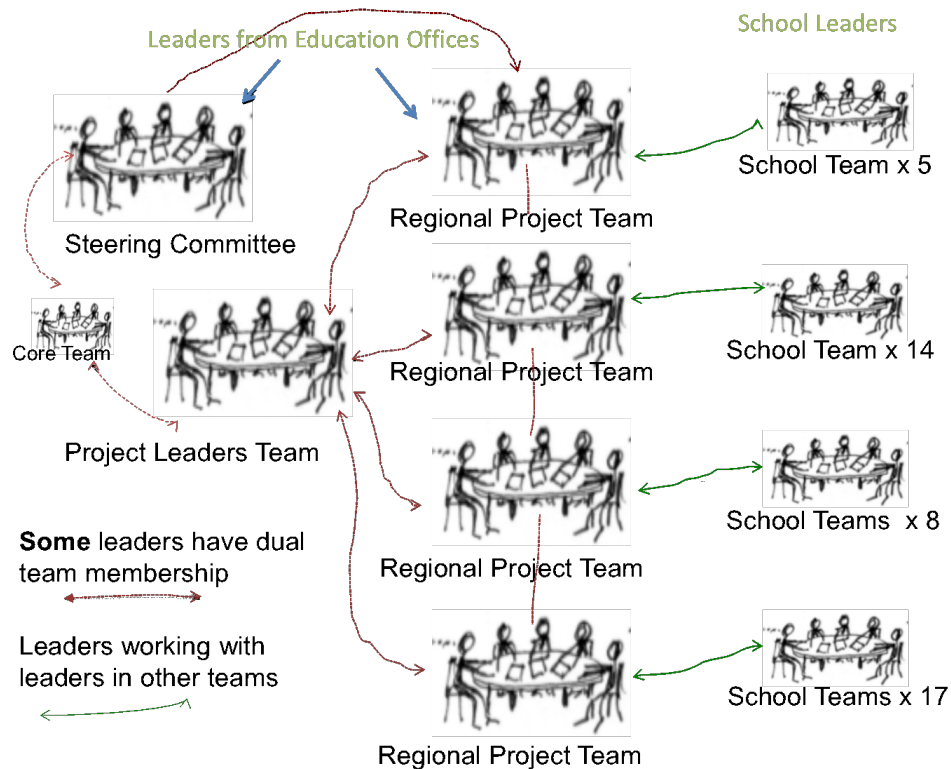


Figure 1.2. Overall configuration of the *Leading for Learning Project*.

A brief description of each element of this configuration is now offered so as to provide further clarity in regard to how the project unfolded and how the respective participants were involved and aligned.

The *Steering Committee* consisted of Managers from the regional and central office locations and reflected a representation from the Learning and Teaching and Religious Education teams. Each Regional Manager in the Steering Committee was a member of the Regional Project Team.

The *Core Team* was not in the initial design, but was formed later and connected the Steering Committee to the work of the Project Leaders Team. I was a member of this team.

The *Project Leaders Team* consisted of education office leaders from Learning and Teaching and Religious Education teams, from both the central and regional office locations. I was a member of this team and had a designated co-leadership role within the

team. The co-leadership role was a collaborative undertaking, involving two other leaders from the central office, one from the Learning and Teaching team and the other from the Religious Education team. Two members from each of the four *Regional Project Teams* were members of this team.

The four *Regional Project Teams* consisted of regional education office leaders from the Learning and Teaching and Religious Education teams. These teams connected directly with the School Teams. Due to variation in regional populations, and thus the numbers of schools, as well as differing regional project implementation plans, each region had a different number of School Teams.

Each *School Team* consisted of school leaders, including the Principal, school leaders with a focus on Learning and Teaching and Religious Education, and classroom teachers.

An explanation of the *Leading for Learning Project* will be further developed in Chapter 4, with particular attention given to my role as a co-leader and how I adopted a researcher as participant stance in this study. Furthermore, Appendix A provides a detailed overview of the project membership.

3. The leaders in the *Leading for Learning Project* were nested in multiple and connected contexts across the education system.

The unique design of the *Leading for Learning Project* reflected both horizontally connected work groups (defined as leaders from different teams working together who were at the same 'organisational level' within the system), and vertically connected work groups (defined as leaders working at different 'organisational levels' within the system) (CEOM, 2010b). Notably, challenges arose as the leaders began to lead an iterative and reflexive project that required dynamic and fluid connections, but within the context of a more traditional organisational structure. The project began to reshape the relationships between leaders, as relationships became forged around learning rather than around designated organisational roles and positions.

1.2.3 The impetus for this research.

The interplay of these three characteristics, and the unexpected challenges that arose and the unintended possibilities that emerged, provided the impetus for this research. While

there seemed to be a clear understanding of the intentions of the *Leading for Learning Project*, some leaders were uncertain about how the project might progress, or how they might lead a project, when the outcomes and processes were not defined or predetermined. Unlike previous professional learning projects initiated by this particular education office, where clear and precise guidelines and expectations were provided, the processes in this project were far more open ended, flexible, and ambiguous, rather than externally mandated. The processes in this project were framed around questions of inquiry that invited exploration, where participants had to personally embrace a range of perspectives and be willing to engage in rigorous dialogue.

As a result, many of the leaders initially voiced concerns regarding how diverse teams could work together when there were such different experiences and expertise. Also, there were doubts about how the necessary knowledge and capacities might be developed within such diverse teams through collaborative, and inquiry focused ways of working. Since the *Leading for Learning Project* did not reflect the usual ways of working, many of the leaders were uncomfortable with the project and, in particular, with their perceived roles. This resulted in a range of experiences including, on the one hand, frustration and uncertainty while, on the other hand, possibilities and freedom. Collectively these experiences offered the potential for capacity building within and across teams, as well as presenting challenges, as the leaders grappled with how they understood their identity as leaders in the unusual and changing context.

Despite these uncertain views and at times uncomfortable experiences, the leaders were committed to the intentions of the project and the new ways of working. The project enabled leaders to move out of the team ‘silos’ and to work with leaders from other teams. In particular, leaders with responsibility for Learning and Teaching and Religious Education worked together, bringing their collective attention to schools and students, rather than working in isolation. Leaders were also energised by the conversations about questions that were at the heart of the education system’s moral purpose, and how this moral purpose might be translated into their local contexts. As well, the inquiry-focused professional learning encouraged leaders to pay attention to what they were learning, and to use this knowledge to discern a way forward that was responsive to their context. It was these experiences, while disruptive at times, that created an environment for capacity building, where there was a strong desire by the leaders to explore important questions

about learning and teaching in a Catholic context, with the belief that this learning would develop the capacity of the system as a whole.

The intention was that the *Leading for Learning Project* would progress for a time period of three years in order to allow for the deep exploration of the questions of inquiry across multiple settings. Also, this length of time was deemed necessary for the establishment of the collaborative and inquiry focused ways of working considered essential for enabling capacity building across the system. However, a decision was made to curtail the project towards the end of the second year so that a change management program called *Change2* could be introduced. This decision reflected the differing agendas within the education system in relation to how to achieve system change and capacity building. *Change2* offered a suite of products intended to direct operational and cultural change more quickly within school and education office settings (Creating Tomorrow, 2013). Essentially, the nature and function of the *Change 2* process reflected the more structurally defined and controlled strategies previously implemented across the education system.

Introducing *Change 2* shifted the work focus of many leaders and reduced their availability to continue the work of the *Leading for Learning Project*. Consequently, choices had to be made by leaders about whether their team could continue the work of the project and, if so, in what form, given the reallocation of resources to *Change2*. This presented a significant disruption to the connected model of capacity building that had formed and diminished the ability of those leaders within the system to learn from the project; that is, to learn about some important questions related to the enactment of moral purpose across the system.

Hence, even though the *Leading for Learning Project* could not be progressed to its completion, the project evolved from seemingly chaotic and disruptive beginnings to a state of high purpose, focused on capacity building, before the change in focus. This thesis will argue that the project, including the unexpected event of *Change2*, provides some important knowledge towards more deeply understanding education systems and system capacity building, particularly when viewed through a complex systems 'lens'. Although it was not recognised at the time, the project created a space for the complexity of the education system to emerge and, thereby, to challenge some established views about the education system as an organisation, about system capacity building, and about

how leadership might enable capacity building within the system. The unexpected event of the introduction of Change2 into the project environment, as well as into the context and timeframe of this research, brought into contrast the experiences of emerging complexity within the project with the experiences of a prescribed and ordered model for educational change. It is important to note that in respect to the timeframe of this research, the decision-making process surrounding the introduction of Change2 occurred during the data gathering phases of the research, enabling me to explore these particular experiences with leaders and the implications for system capacity building.

Hence, the insights, possibilities, dissonance, and challenges of the *Leading for Learning Project* provide the impetus for this research. The experiences of leaders in the *Leading for Learning Project* raised questions on many fronts:

- How to engage with important questions of system purpose through processes of inquiry?
- How to enact leadership that interrupts the usual ways of working and thinking within an education system and how this interruption might enable capacity building?
- How to understand uncertainty as necessary for learning?
- How to sustain diverse practices or projects as places of exploration, within traditional environments?

It is these kinds of questions, and the uncertainties that surrounded them, that frame this research problem.

The following section describes the stance of the researcher highlighting how my experience of the education system context and, in particular, the *Leading for Learning Project*, influenced how I understood the research problem.

1.2.4 Understanding personal context: The stance of the researcher.

In detailing my personal context, I not only provide insight into the way I understood my experiences within the particular education system, and the way these intersected with the emerging research problem, but it also signals the importance of my self-reflective practices as researcher. Self-reflection acknowledges the influence my prior experiences, assumptions, and perceptions have on my thinking and activities and on the questions I

pursue: “no research is free of the biases, assumptions, and personality of the researcher and we cannot separate self from the activities in which we are intimately involved” (Sword, 1999, p. 277). The self-reflexive process of the researcher recognises how the worldview and background of the researcher affects the way she constructs the world, uses language, poses questions, and chooses particular orientations for making sense of experiences.

As an educator in Catholic education systems for over two decades, I have worked in rural and metropolitan schools within the Australian state of Victoria undertaking teaching and leadership roles. I have also worked in a regional office location within the CEOM where I was employed as a regional school advisor in teaching and learning working with teachers and leaders across a range of school settings. More recently, I have been employed in a central office location of the CEOM working with school teams engaged in teacher/leader professional inquiry with a broad focus on student learning within a Catholic context. These professional inquiries have informed system policy and initiatives with particular consideration given to learning and teaching in a contemporary Catholic school context. The *Leading for Learning Project* was one of these teacher/leader professional inquiry projects and my involvement in the project was in a co-leadership role.

My experiences of co-designing and facilitating professional learning provided me with opportunities to explore the different approaches taken to enabling capacity building within and across schools, and within education office settings. Such experiences raised questions for me about how the stance of leader and learner might be enacted simultaneously, and how this might influence relationships within the system so as to bring greater attention to the collective capacity within the system. My experiences suggest that when confronted with the challenge of complex questions, it is the collective capacity of the group that finds a way forward, which seems to be particularly important when the *way* or the *place we are moving to* may not be known.

My experiences of working and learning in an education system has also caused me to wonder whether the system fully benefits from the diverse capacities and potentials of the human person, or whether these are marginalised to ensure the consistent delivery of outcomes focused on performance. The following anecdote from my own experiences

supports my hunch that the current education environment is unsure of how to utilise or encourage what the individual has to offer, and that any expressions or enactments of passion are neutralised:

In commencing a new position within the CEOM, and discussing with a senior leader those things I was passionate about and would bring to the work, I was told “We have let go of our passions years ago”.

I would suggest that such a reply is a result of the continual influence and pressure of an education environment that values fixed outcomes, set timeframes for delivery, and performance measures that, in turn, confine employees to narrow roles and, thereby, enable only partial contributions. The engagement with human possibility seems too complex, too messy and distracts the organisation from efficiency and achieving its predetermined success targets.

It is these experiences, briefly described, and my impressions and interpretation of them, that shapes my understanding of the research problem and the mindset and commitment that I bring to the exploration of the research question guiding this study.

Given these contexts and experiences, the research problem that arises concerns how leaders across the multiple and diverse contexts of CESM enable system capacity building. In particular, how the human capacities of leaders are enabled and focused towards system capacity building. This research problem was illuminated when the usual ways of working and enacting leadership within the system were disrupted and intersected with the traditional boundaries and mindsets of the organisation.

1.3 Situating the Study within the Broader Educational Research Context

This thesis takes the position that the current regulatory and reductionist approaches to education reform are inadequate for enabling system transformation. This position is supported by researchers, like Hargreaves and Shirley (2009), who call for a “New Way of educational change that is suited to the dramatically new problems and challenges we are encountering” (p. xi). There is considerable agreement amongst scholars that after decades of reform few countries have been successful in improving their education systems as a whole (Fullan, 2011a; Harris, 2010), or aligning their reform efforts to the purposes of enhancing student learning in its broadest sense, as Harris (2010) comments:

“Reforms come and go, changes are embedded, implementation is varied and success is short-lived” (p.197). Sahlberg’s (2006) critique of competitive driven education reform also aligns with this position: “Co-operation and networking rather than competition and disconnectedness should ... lead the education policies and development of education systems” (p.285). This assessment of education reform has led to a convergence of scholarly discussion towards developing whole of system capacity building as a way of refocusing reform efforts that enable a collective commitment by all within the system to learning *for all*, focused on enhancing student learning (Fullan, 2010; Mourshed, Chijioke, & Barber, 2010). As Stoll (2009) emphatically states, “people with diverse roles in the system will have to connect and learn together” (p.124).

That said, while a whole of system capacity building is acknowledged as important in the literature, it is conceptualised within existing understandings of education reform (Stoll, 2009). The efforts of system capacity building, as Hargreaves and Shirley (2009) and Fullan (2011a) point out, continues to be directed towards narrowly defined purposes, with a strong endorsement for testing and accountability, implemented through interventionist or cause and effect solutions. In particular, Hargreaves and Shirley (2009) refer to the influential report by McKinsey & Company (Barber & Mourshed, 2007) that correctly brings attention to whole of system capacity building, however, as Hargreaves and Shirley argue, is framed within a mindset of delivering quick fix strategies aimed at achieving governments’ short term targets. It is also noted, that while there has been a shift to whole of system capacity building, the central offices of the education system are often ignored within the broader understanding of *whole* of system capacity building. Leaders in these settings are understood as “directing the work” of others (Katz et al., 2008), rather than being in partnership with others in the processes of capacity building (Hargreaves & Shirley, 2009). In response to these identified concerns scholars like Harris (2010), Stoll (2009), and Hargreaves and Shirley (2009) call for new perspectives that offer alternative understandings of the education system and of system capacity building, that transcend the existing structures and regulatory mindsets of education reform (Harris, 2010; Stoll, 2009).

This thesis provides a unique contribution towards these identified concerns by engaging with an alternative perspective formed from the field of complexity theory and which supports the interpretation of education systems as complex adaptive systems; that is,

open, dynamic and connected systems constituted by many relationships (Uhl-Bien & Marion, 2009). It then follows that system capacity building is a complex and emergent process, which offers possibilities for other ways of thinking, working, and being within an education system. This is new territory for understanding education systems, as Jäppinen (2014) comments the use of complexity research is uncommon within the context of education and even sparser in field of educational leadership. Such a conceptualisation shifts the focus from understanding the system as complicated, predictable, and stable, to a focus on the system as complex, unpredictable, and emergent, thereby offering alternative perspectives and new understandings of education systems, capacity building, and leadership.

Such a conceptualisation also creates opportunities for focusing the efforts of system capacity building towards a purpose of education that Starratt (2007) describes as authentic and transformative, where full attention is given to the person of the learner and how he/she grows towards their full humanity through engagement with the diversity and complexity of the world that shapes their human experience. This understanding of purpose frames a moral purpose of education used in this thesis. Such a purpose, rather than being narrowly defined and focused on performance, offers diversity in its expression and is open to continual re-interpretation in multiple contexts, while being explicitly centered on the person of the learner.

Hence, the rationale for this study is situated within scholarly research where there is a growing interest in system capacity building, but which could benefit from an alternative frame of reference as a way of addressing the limitations of the current regulatory and performance mindset of education reform. This study seeks to address these limitations by engaging with theoretical underpinnings of complexity theory, in particular the fields of research focused on complex adaptive systems. The research problem is identified within the context of a particular education system, CESM and within a particular project, the *Leading for Learning Project*. The unique features of the project were opportune for exploring the possibilities of system capacity building and providing insight into what happens when the traditional organisational structures of the particular education system are disrupted and intersect with contrasting ways of working and leading within the system.

The following section will provide an overview of the theoretical framework used to guide the research design. This will be followed by a discussion of the significance and limitations of the research. The chapter will conclude with an overview of the thesis.

1.4 Research Design

Research designs within the field of complexity science, with a particular interest in understanding human social systems like organisations, need to bring attention to the complexity of such systems and how meaning emerges as a consequence of the dynamic and nonlinear interactions across multiple dimensions of the system. As Morrison (2008) suggests, engagement with complexity theory as a theoretical frame means using a research design that seeks to understand relationships, connections, and emergence within the context of an open and dynamic system. Given this emphasis, a relativist ontology and a subjective epistemology guides the design of this research, bringing attention to the experiences of leaders and how individuals and groups seek understanding and construct meanings that are varied and multiple, providing insight into the complex, challenging, and often-disruptive work of system capacity building (Creswell, 2003). It is the attention given to the complexity and richness of this dynamic, where subjective meanings are negotiated and emerge through interaction and dialogue with others, that makes this orientation appropriate for this research (Candy, 1989; Crotty, 1998). As Preiser and Cilliers (2010) comment:

complexity is not something that can be pinned down by analysing the properties of a certain part of the system or taking the components apart and seeking for traces of complexity within the isolated parts...we are challenged to describe the properties that emerge as a result of the interactions amongst the components. (p. 266)

In adopting a complexity 'lens' this research offers an understanding of the human person as deeply connected to the social web of relationships and brings particular attention to how knowledge and meaning is constituted within these dynamic relationships *between* individuals, and how, in turn, it is constituted within the system (Preiser & Cilliers, 2010).

An ethnographic approach is used to explore the experiences of leaders within this study, giving focus to the multiple interactions within and beyond the project, and the interpretations of these interactions, as they emerged in the social setting (Timmermans &

Tavory, 2007). Importantly for the purposes of this study, this methodology is exploratory and open-ended, enabling me to attend to a broad range of experiences that reflect the particularity, diversity, and connectedness of the experiences of the leaders, with a gradual refinement of focus given to the research question (Hammersley & Atkinson, 2007). The ethnographic methodology also promotes a view of the researcher as participating in the setting thereby supporting the researcher-as-participant stance adopted for this study. This stance aligns with a key principle of complexity theory, that of participation which, Goodwin (2000) suggests, provides insight into the dynamic interactions and emergent meanings within the system. This stance afforded me the opportunity to participate in the everyday experiences of ‘being there’ with the leaders; that is, watching, listening, and asking questions through formal and informal interviews, and with a continual focus on understanding the complexity of leaders’ experiences and interpretations (Hammersley & Atkinson, 2007). Given my co-leadership role in the project, this stance was situationally appropriate for this study and underpinned by the belief that research is enacted with others, not done to others or on others (Heron & Reason, 1997; Kemmis, 2008). The methodological and ethical implications of this stance are more comprehensively addressed in Chapter 4 of this thesis.

It was during the data-gathering phase of the study that the decision was made by leaders in the CEOM to introduce the change management initiative, Change2. While this did not impact on the timeline or the opportunities for data gathering, the uncertainty surrounding the decision-making process, and then the eventual decision to introduce Change2, influenced the experiences of leaders within the project and, in turn, leaders explored these experiences during the interview process. The following strategies were used to gather data about the experiences of leaders:

- One to one interviews, with an invitation to create a drawing of their experiences.
- Focus group interviews.
- Participant observations.
- An online survey.

This range of data gathering strategies, and the use of both word-based and visual strategies, provided access into the multiple and complex experiences of the participating leaders (Prosser & Loxley, 2007). A detailed thematic analysis process

was used during the analysis and interpretative stages of the research, and is described in Chapters 4 and 5. While it may not be usual to devote two chapters to this process, such an approach enabled me to fully explore the emergent nature of the research process and to richly reflect the complexity of the experiences of leaders as understood through the lens of the research question (Attride-Stirling, 2001). Thematic analysis is described by Attride-Stirling (2001) and Fereday and Muir-Cochrane (2006) as a series of iterative phases that includes the presentation of data, the analysis and interpretation of data and the identification of thematic networks. The last phase of the process involved using the thematic networks as a heuristic to again explore and describe the experiences of leaders. The process was meticulously detailed to offer transparency and to demonstrate the way I engaged with the diverse and multiple experiences of leaders, in the context of understanding the complexity of human social systems, like education systems. The thematic analysis process led to the development of four key findings that were taken into the *Discussion Chapter* of this thesis

1.5 Significance of the Study

The study is significant because it departs from the performance and regulatory paradigm that consistently defines the purposes of education systems and the practices of leaders within those systems and in doing so, offers ways to address the recognised limitations of such a paradigm, as identified in the review of the literature. This study is significant for the following reasons:

First, this study offers a conceptualisation of an education system as a complex adaptive system and brings attention to the complex and emergent process of system capacity building. Hence, this thesis offers a contemporary and emerging construct for exploring how leaders enable system capacity building. The study identifies findings in relation to a) leadership practices that enable capacity building, b) the conditions of emergence enabled by these leadership practices, and c) the resultant emergent behaviours understood as expressions of system capacity building. This is a significant contribution as the study offers findings and insights that are particularly important, in not only conceptualising education systems as complex adaptive systems, but also the practical

implications of such a conceptualisation, thereby contributing to current leadership literature.

Second, this study has identified that the field of complexity theory, and in particular complex adaptive systems, is a useful conceptual framework for understanding education systems and which has rarely been used to benefit education research (Jäppinen, 2014). The conceptual framework I developed for the purpose of this research offers an alternative insight into how leadership enacts system capacity building as an emergent process, focused on enabling sustained engagement with moral purpose.

Third, the literature review identified a paucity of literature that gives attention to *whole of system* when reporting on studies that focus on system capacity building, with limited attention given to the role of education offices or the central bureaucracy of the education system in the attainment of this essential outcome. This research has a *whole system* perspective with attention given to how leaders in schools and in the education offices across the CESM enact system capacity building.

Finally, a further significance of this research is identified due to the unexpected introduction of the Change2 initiative. This event brought into sharp focus the differing narratives underpinning the ways of working and being in the education system; one narrative upholding positional power relationships centred on control and management, and the other an open and dialogical narrative centred on the capacity of the person and the emergent possibilities of the system. This means the findings of this thesis identify not only the enactments of leadership that develop system capacity building enabling the sustained engagement with moral purpose, but also the actions, and the implications of these actions, that can diminish system capacity building.

1.6 Limitations

The limitations have been addressed throughout this thesis. The following offers a summary of the limitations:

The study is limited in scope, in that it focuses on the experiences of leaders in one particular project, and in one particular education system. As such, the findings and

conclusions of the study offer important considerations to others whose contexts may appear quite similar, recognising that further studies are needed to add depth to the scholarship of this work.

The research methodologies selected for this research present some potential limitations, as well as some possibilities for further exploration. Complexity research is premised on the understanding that complex systems cannot be fully understood, nor can they be defined by analysing one part of the system (Preiser & Cilliers, 2010). Thus, the researcher is challenged to understand the system as emergent, as a constant interplay of dynamic interactions, and to be open to the ongoing transformation of understandings that emerge. One way this study has attended to this limitation is through a detailed thematic analysis process that explored the unique and contextualised experiences of the participating leaders.

My role as co-leader in the *Leading for Learning Project* and my stance as researcher as participant presents some limitations, such as; familiarity with the setting, my relationship with participants, and researcher bias. A number of strategies are included in the research design to minimise these potential limitations and to ensure trustworthiness of the research. These include: researcher self-reflection strategies; triangulation of the data; participant checking; and, the engagement of a ‘critical friend’ (Tobin & Begley, 2004).

1.7 Overview of the Thesis

The final section of this chapter provides a summary of the following seven chapters as a way of providing an orientation to the overall thesis.

The Literature Review is comprised of Chapter 2, Part 1 and 2 and Chapter 3. *Chapter 2: Part 1 – The Broader Educational Context*, presents an overview of the context in which the study is situated. The discussion addresses three areas that directly influence system capacity building in education systems: the socioeconomic context of neoliberalism; neoliberalism and its influence on education reform; and, the moral purpose of education. It is argued that these are important in understanding the research question. This chapter situates the study within the context of current scholarly discussion in relation to these influences, thereby providing a context for understanding the broader dimensions of the

research problem, and signaling the rationale for why an alternative conceptualisation of education systems and system capacity building is necessary.

Chapter 2: Part 2 - System Capacity Building, presents a review of the literature that gives attention to whole of system capacity building. This chapter suggests that whole of system capacity building is influenced by the emphasis and direction of the current education reform agenda, one that is described in the literature as regulatory, reductionist, and performance orientated. While it is argued that whole of system capacity building is important, when understood from this perspective it is limited in its scope, with parts of the system ignored, and as such, unlikely to give adequate attention to a moral purpose of education centered on the person of the learner. In response to this assessment, this chapter suggests alternative understandings of system capacity building are necessary.

The purpose of *Chapter 3 – Education Systems as Complex Adaptive Systems*, is to explore an alternative paradigm that conceives education systems as complex adaptive systems. The chapter introduces the diverse field of complexity science and illustrates how this emerging field is influencing contemporary organisational theory. It demonstrates however, that the field of educational research has not drawn on these theories to any great extent and so has rarely benefited from this theoretical frame. In contrast, this research engages with the theory of complex adaptive systems as a way to investigate the research question guiding this study. To this end, a review of empirical research within an interest in understanding organisations as complex adaptive systems was undertaken. This review resulted in the development of an original conceptual framework, and then used to guide the analysis process and the subsequent discussion sections of this thesis.

Chapter 4- The Methodology: Research in the Field of Complexity provides a detailed description and justification of the research design. A relativist ontology and a subjective epistemology provides the framework for the development of this research design. Careful consideration is given to how the research design is understood within the field of complexity. A rationale for the ethnographic approach is given, as well as how the researcher-as-participant stance is understood within this particular study. Also, the data gathering strategies are outlined, describing how they were conducted in the context of this research. The thematic analysis process is described, followed by the presentation of

Phase 1, Steps 1 -5, *Presentation of the data, initial analysis and interpretation*. This section of the chapter outlines the processes of memoing, coding the data, identifying themes, and reviewing the themes. The chapter concludes with the presentation of four thematic networks.

The focus of *Chapter 5* is Phase 2 of the thematic analysis process, *Exploration of the Thematic Networks and their Meaning*. This chapter provides a detailed description and exploration of each of the four thematic networks and generates a set of interim findings for each thematic network. The chapter concludes with the identification of the four key findings of the study.

Chapter 6, The Discussion- Exploring the Deep Ecology of an Education System is structured around the key findings and offers an interpretation of the experiences of the leaders across the multiple connected contexts of the project. The discussion explicitly draws on the conceptual framework I developed in Chapter 3, bringing attention to the particular leadership practices that enable system capacity building, the conditions of emergence created by these enactments of leadership and the resultant emergent behaviours. Drawing on the findings and insights of the study this chapter presents a response to the research question.

The final chapter, *Chapter 7- Conclusion*, provides a summary of the study, revisiting the argument for an alternative conceptualisation of education systems and system capacity building, and how the field of complexity research provides the framework for this alternative conceptualisation. The chapter presents a renewed conceptualisation of system capacity building and recommendations for practice. Consideration is given to the contribution this study makes to existing fields of research in education and complexity and how it offers new ways to conceptualise the work of leaders within education systems and the subsequent implications for practice. The chapter also identifies the limitations of the study, and offers recommendations for further research.

Chapter 2

Literature Review: Part 1 – The Broader Educational Context

Chapter 2 is the first of two chapters that comprise the Literature Review of this thesis. Chapter 2 is divided into two parts, with Part 1 presenting an overview of the broader educational context in which this study is situated, and Part 2 providing a review of the literature that gives particular attention to system capacity building.

Part 1, *The Broader Educational Context*, presents the context for understanding the broader dimensions of the research problem and signals the rationale for why an alternative conceptualisation of education systems and system capacity building are necessary. The review of literature highlights the influence of the current neoliberal paradigm on how governments understand the purpose of education within society, how they describe successful education systems, and the reform strategies they put in place to achieve this success. As both Hargreaves (2009b) and Sahlberg (2006) point out, the overriding emphasis on economic competitiveness and the high stakes monitoring and accountability practices, places increasing pressure on governments to demonstrate that their country's education system is high performing and producing improved outcomes on narrowly defined benchmarks. As such, it will be argued that such an environment marginalises the possibility of more expansive educational purposes that value the personal and social purposes of education, thereby skewing the focus of whole of system capacity towards standardised performance.

Part 2, *System Capacity Building*, presents a review of the literature with an interest in understanding whole of system capacity building and how leadership enables system capacity building. The analysis of the literature resulted in a renewed conceptualisation of system capacity building that brings attention to the purpose of capacity building and how leadership might enable capacity building across the system. However, it will be argued that while it is possible to conceive of such a conceptualisation of system capacity building, in practice system capacity building presents considerable challenges when enacted in the current education environment, as outlined in Part 1 of this chapter, as it

disrupts the established structures, relationships, and purposes of the education system embedded within the regulatory and performance mindset of education reform.

Given these arguments, to be developed in Part 1 and 2, the chapter concludes with the suggestion that alternative understandings are necessary that open up possibilities for other ways of being, thinking, and working in education systems that transcend the regulatory and performance mindset of the education reform agenda. In particular, alternative understandings where system capacity building is focused on learning for all, in its fullest and broadest sense, and where leadership is focused on the sustained engagement with the moral purpose of education. To this end, I invite an exploration of education systems, system capacity building, and the enactment of leadership from perspectives drawn from the field of complexity theory, and in particular complex adaptive systems. This exploration will be the focus of Chapter 3.

Part 1 of this chapter *The Broad Educational Context* addresses the following three areas:

1. Socioeconomic context of neoliberalism.
2. Neoliberalism and its influence on education reform.
3. Moral purpose of education.

Each of these areas directly influences the rationale and practice of system capacity building in education systems and, thus, is important in understanding and responding to the research question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

The first of these areas to be addressed provides a brief description of neoliberalism as a way of providing a contextual framing of the research question. The second area expands on this description by demonstrating how neoliberalism has influenced education reform and, in particular, the purpose of education reform and the strategies pursued. The final section provides an alternative perspective on the purpose of education, by engaging with the literature that explores the moral purpose of education.

2.1 Socioeconomic Context of Neoliberalism

In recent decades education systems globally have been influenced in some form by the rise of a neoliberal, or economic rationalist, mindset. Broadly this means education has

been influenced by “the agenda of economic and social transformation under the sign of the free market” (Connell, 2013a, p. 100). Neoliberalism is a theory influencing political and economic practices, which proposes that human wellbeing is best served by enabling individuals to participate in the economy within an institutional framework committed to free market policies that encourage private enterprise and consumer choice (Harvey, 2005). In this market dynamic of neoliberalism, education is regarded primarily from an economic viewpoint and understood as a producer of labour and skills in response to meeting the demands of competitive global markets. Specifically, as Connell (2013a) points out, education becomes a commodity, education institutions become providers that compete for money and students, and parents are consumers exercising choice. Ball (2008) argues that “the social and economic purposes of education have been collapsed into a single, overriding emphasis on policy making for economic competitiveness and an increasing neglect or sidelining (other than in rhetoric) of social purposes of education” (pp. 11-12). Scholars, like Connell (2013a), Davis and Bansel (2007), and Harvey (2005), suggest that neoliberalism has become hegemonic as a model of discourse, “to the point where it has become incorporated into the common-sense way many of us interpret, live in, and understand the world” (Harvey, 2005, p. 3). These environments significantly influence the purpose of education, the kinds of social relationships that enable this purpose, and the strategies adopted to achieve these purposes.

One of the key mechanisms serving the neoliberal paradigm is a management model that emphasises performance, quality, and excellence coupled with the market imperatives of competition and choice (Ball, 2008). Managerial models framed within this neoliberal paradigm are often presented as a move away from centralised control, providing flexibility of approach and local problem solving. However, when such approaches are framed within environments of accountability and high levels of scrutiny and monitoring of results, centralised control is still intensely experienced and, according to Leithwood, Jantzi, and Mascall’s (2002) review of large scale reform, is one of the reasons for ineffectual reform efforts. Further to this assessment, one of the implications of this kind environment is low levels of trust where interpersonal and role relationships are distorted, with attention given to outputs and performance, rather than on strengthening professional integrity and judgment (Ball, 2008). A management model understood within the context of a neoliberal mindset has profound consequences for how leadership is understood, for the nature of learning and teaching, as well as for the inner-life of the educator (Ball,

2010).

While the influences of the neoliberal paradigm may vary, occur over time, and manifest differently depending on the contextual factors within countries, the argument presented here suggests that a neoliberal paradigm is currently influential in shaping the policies and strategic frameworks of education. In summary, therefore, it is argued that a neoliberal paradigm influences the purposes of education and how leadership enacts these purposes. It is also argued that not only does this paradigm influence what educators do, it influences who they are, what they value, and how they are in relationship with others (Ball, 2008). This is a key consideration for this research intent on understanding how leaders enable system capacity building, and the factors that might influence this leadership focus.

2.2 Neoliberalism and its Influence on Education Reform

In recent decades there has been renewed interest in understanding the education reform practices of countries, in assessing what they have achieved by their reform agendas, and in how they have articulated their direction and actions for the future. Two large scale research projects by McKinsey and Company, *How the world's best-performing school systems come out on top?* (Barber & Mourshed, 2007) and *The world's most improving school systems keep getting better* (Mourshed et al., 2010), as well as reports by the Organisation for Economic Co-Operation and Development (OECD) like *Strong performers and successful reformers in education* (Organisation for Economic Co-Operation and Development (OECD), 2011), have made prominent contributions to these discussions. The authors of McKinsey and Company's first research report concluded that few countries had been successful in achieving improved whole of system performance, but they recognised a determination amongst education system leaders to understand what constitutes successful whole of system reform and to delineate successful intervention strategies (Barber & Mourshed, 2007). In light of this, the second research project was dedicated to understanding and distilling the elements of successful system performance (Mourshed et al., 2010). Fullan's (2011a) commentary on these reports suggests they have created a sense of urgency for system improvement and intense interest in understanding how this might be achieved and measured. In the current neoliberal environment this focus on system achievement has gained considerable momentum, given that education

performance has become an important marker of economic progress and global productivity (Riley, 2000; Sahlberg, 2006). Riley (2000), for example, suggests that educational priorities are now closely linked to, if not subsumed within, the economic priorities of elected governments which, Connell (2013b) argues, means the focus is on raising student achievement so as to maximise economic participation for the goal of increased productivity.

Such dogged adherence to these neoliberal principles has created a mindset focused on developing efficiencies and promoting economic growth, drawing attention away from other social, environmental or cultural aspirations and, as Hamel (2007) suggests, insulating those within education systems from the emerging, complex, and socially important issues of contemporary society. Such a mindset obscures the possibility of education systems developing an expansive purpose focused on aspirations that engage with complex and socially important issues. Issues of sustainability, social cohesion, and personal and community wellbeing, for example, are often marginalised in favour of organisational efficiencies and system performance (Hamel, 2007). This narrowing of purpose closes the education system to the sensibilities of how their activities intersect with the lives of those within the education system – of students, teachers, and leaders - but also to the broader society within which the education system exists (Hames, 2007). Hamel (2007) argues that such an approach “gets free spirited human beings to conform to standards and rules, but in doing so squanders prodigious quantities of human imagination and initiative.... bringing discipline to operations, but imperiling organisational adaptability” (p. 9).

This position, however, is not presented here without recognising there are important guiding international statements that aspire to education purposes focused on the societal and personal benefits of education. In 1996 the United Nations Educational Scientific and Cultural Organisation (UNESCO) identified four pillars of education: *Learning to know*, *Learning to do*, *Learning to live together*, and *Learning to be* (Delors, 1996), and these statements continue to be foundational in understanding the purpose of education and the focus on student learning. More recently UNESCO has framed six internationally agreed goals to meet the learning needs of all children, young people, and adults by 2015 (United Nations Educational Scientific and Cultural Organization (UNESCO), 2000). The OECD has also contributed to this discussion by drawing on an extensive research base to

provide some robust statements on the nature of learning (OECD, 2010). Such ongoing declarations are underpinned by the belief that education is a human right, where the education offered meets the learning needs of young people in the best and fullest sense of the term. Australia also has guiding statements that reflect a national commitment to the right of all young people to quality education that promotes the full development of the learner (Council of Australian Governments (COAG), 2013). The following goals are stated for young Australians:

Goal 1: Australian schooling promotes equity and excellence.

Goal 2: All young Australians become:

1. Successful learners,
2. Confident and creative individuals,
3. Active and informed citizens. (Ministerial Council on Education Employment Training and Youth Affairs, 2008)

However, while such documents advocate for education to be focused on learning for students in its broadest and fullest sense, what is being argued here is that such worthy aspirations are increasingly marginalised through a discernable convergence of education reform strategies centred on the market, management, and performance standards (Ball, 2008).

Particular to the current education reform environment is the highly scrutinized and competitive global arena where school and country comparisons are commonplace. The yardstick of educational success is no longer simply improvement according to national standards, but against international performance benchmarks like the *Programme for International Student Assessment* (PISA) (OECD 2011). The national and international scrutiny of education, generated through publication of performance, has created heightened public interest and expectation of improvement as measured by these particular sets of benchmarks, placing increased pressure on governments to ensure their education system is high performing and producing improved measurable outcomes for students (Hargreaves, 2009a). While high expectations of education systems and public interest in education is highly desirable, when intensely focused on narrow performance benchmarks in an environment of comparison and competition, it can be argued, as Harris (2011) and Hargreaves and Shirley (2009) do, that students and their life chances, their wellbeing, and their learning are not the centre of these endeavours. In Australia this focus on narrowly defined benchmarks is exemplified in the following two national

targets:

1. Australia placed in the top 5 countries internationally in reading, mathematics and science by 2025; and
2. Australia considered a high quality and high equity schooling system by international standards by 2025 (COAG 2013, p. 7).

Such targets frame Australia's reform agenda within the context of international benchmarks, and, as Ball (2008) suggests, bring intense attention to the attainment of these measures, as well as scrutiny of what other top performing countries are doing to achieve such measures. Sahlberg (2006) argues that the temptation is to imitate what other countries are doing without any deep, long term or contextual analysis of their actions and influences. In chasing such external targets, debate about education reform moves further away from educational research grounded in an understanding of teaching and learning and the expansive purposes of education.

Despite the complexity of local and global factors influencing the performance of education systems, there is still a desire to determine common intervention strategies that are deemed to have universal relevance and, thereby, replicate system success (Mourshed et al., 2010). To this end, sweeping whole of system strategies have been introduced, including performance standards for students and teachers, systemic testing schedules, centrally designed curriculum frameworks, and the publication of performance information (Hargreaves, 2009a, 2009b; Leithwood et al., 2002; Sahlberg, 2006). However when such strategies, uniformly adopted, are the lead drivers of education reform, it is unlikely that the kind of culture necessary to achieve whole of system capacity building that is focused on an expansive education purpose of students and their learning, can be achieved. It could be argued that countries such as Australia, who are leading their reform efforts with these drivers, are not well placed to focus on whole of system capacity building that enables an expansive focus on student learning (Fullan, 2011a).

In summary, education reform played out in the dynamic of a neo-liberal paradigm places increasing pressure on governments to ensure that their country's education system is competitive, high performing, and producing improved educational outcomes on a large scale. Despite some worthy aspirations for young people that flag the personal and social purposes of education, educational reform strategies are intensely focused on performance

benchmarks resulting in a more uniform, tighter and narrow focus on learning. Hargreaves (2009b) and Harris (2011) argue that such a narrow focus leads to compromised outcomes for students as the possibilities for broader social and personal benefits are marginalised.

2.3 The Moral Purpose of Education

In contrast to the neoliberal ideal of education, an alternative view on the purposes of education will now be offered that draws on literature that discusses the moral dimension of education. It is important to note that the moral dimension of education does not mean a focus on moral issues that may arise in educational contexts, neither is it about moral instruction. Rather, the moral dimension of education brings attention to the purpose of education that recognises the moral agenda of learners. Starratt (2007) describes this as “an intrinsic moral agenda that belongs to them as full human beings...to find, create, own, and be true to themselves” (p. 165). As such, this thesis uses the term moral purpose to describe the purposes of education where there is a focus on the learner and how he/she grows into the fullness of their unique humanity (Starratt, 2007). In presenting a moral purpose of education, it does not follow that there is one defined purpose of education. A moral purpose of education offers a plurality of purposes, but is always focused on the learner, their learning, and their authentic human development. Hence, a moral purpose offers diversity of expression and is open to continual re-interpretation in multiple contexts, while being explicitly centred on the care of each person.

The research question guiding this study is based on the assumption that system capacity building, enabled through the work of leaders, is focused on the “sustained engagement with the moral purpose”. In arguing that this premise be accepted, the following section will provide an overview of how a *moral purpose* of education is understood within the literature and, in turn, in relation to this study. It will also include a discussion on how moral purpose is understood within a Catholic education system, the education system context for this thesis. This will lead to a position on the meaning of “moral purpose” to be used in this research.

The term moral purpose is increasingly used within a range of literature to refer to the purpose or goals of education and therefore it has a broad interpretation. It is not

uncommon for the goals of education, like the ones described in the previous sections, to be referred to as the moral purpose or imperative of education, for example, as Fullan (2011b) suggests, “for education reform, it should be clear that the moral imperative focuses on raising the bar and closing the gap in student learning and achievement for all children regardless of background” (p. ix). Of interest to this research is reference to moral purpose explicitly centered on the human person and how this purpose is fundamental in centering all activities of the educational endeavor towards the learner and his/her learning (Bezzina, 2008; Macbeath, 2006). This view is not uncontested, and is often marginalised within the reform literature underpinned by a neoliberal paradigm, where the focus is on the *performance* of the learner (Hargreaves & Shirley, 2009). Discussions about the purposes of education are important as they reveal the value positions of individuals and organisations (Biesta, 2009), provide scrutiny of current positions, and provide insight into why some positions may be absent within educational discourse (Starratt, 2005).

Consideration of the moral purpose of education means recognising that each learner has the right to understand and explore their authentic selves (Starratt, 2007). This is something that unfolds every day for learners as they engage in relationships with others and grapple with the challenges and unexpectedness of life. It can be suggested that the moral purpose of education is one focused on self-understanding, where learner identity is continuously constructed through the ongoing interpretation of life experiences; it can be understood as a quest for authenticity. Charles Taylor (1991) provides a philosophical examination of this by describing authenticity in this way:

There is a certain way of being human that is my way. I am called upon to live my life in this way, and not in imitation of anyone else’s...Being true to myself means being true to my own originality, and that is something only I can articulate and discover.... I am realising a potentiality that is properly my own. (pp. 28-29)

This authenticity is grounded in the freedom to determine oneself in a diversity of community and cultural contexts, where the authenticity of the person finds its fullest realisation in relationship with others, and through contributing to their communities (Bezzina, 2008; Starratt, 2004). Human and social contexts are integral to enabling the full expression of the individual, and of the community, as it is within these multiple contexts that individuals and groups engage in an ongoing search for who they are and who they are in relationship with each other (Starratt, 2007). As Starratt (2007) and

Charlton (2008), drawing on the work of Gregory Bateson, concurs, the moral purpose of educational endeavours is focused towards enabling dynamic relationships of mutuality within the social, cultural, and natural worlds of which learners are integrally connected. This view of moral purpose, focused on the learner and the community of learners, is central to understanding how moral purpose is understood within the context of this research. Thus, it is also central to understanding the focus of system capacity building within education systems.

The focus of this study is the Catholic education system, Melbourne (CESM), hence it is important to understand how the moral purpose of education is understood in this particular education context. Within a Catholic education context the Christian narrative profoundly shapes the moral purpose of education (Catholic Church Congregation for Catholic Education, 1998; CEOM 2009d; Grace, 2010). This purpose understands the human person “as a ‘life-filled’ ‘image of God’ ... receptive and [with] the ability to be creative in the development of his or her life. It means that not everything about being human is or can be predetermined” (Pollefeyt, 2013, p. 21). In this particular education system context, moral purpose is inspired by the centrality of the human person characterised by an openness or indeterminacy. Pollefeyt (2013), drawing on the tradition of hermeneutics, suggests that the openness and indeterminateness of the human person creates a receptiveness to, and a longing for, meaning. In a Catholic education context, there is an orientation that encourages the learner to discover and explore this “hermeneutical space in themselves and each other” and as Pollefeyt (2013, p. 22) suggests, and to open it up even more for young people so that they can engage fully with who they are, who they are in relation to others, and how they might engage with their world. The Christian narrative is offered as a way to explore and to deeply understand and express one’s own authenticity (Pollefeyt, 2013). This occurs in the context of a plurality of views that characterise our contemporary society, creating a dynamic of interruption; where diversity interrupts our personal narratives and the narrative of the Christian traditions (Boeve, 2003). Such a context “challenges people to give shape to their personal identity in conversation with others, against the background of a dialogue and sometimes also a confrontation with the Catholic traditions” (Pollefeyt & Bouwens, 2010, p. 203). This understanding of the purposes of education in a Catholic education context characterises both the particularity, and evolving interpretations, of moral purpose that

underpin how it is understood in the context of this research and, in particular, the *Leading for Learning Project* that is the focus of this study.

While the question of the purposes of education is complex and defies a definitive answer, the preceding discussion offers a reference point for understanding how the purposes of education are understood within the context of this thesis. This thesis takes a view about the purposes of education as focused on the person of the learner, and on learning that is meaningful and transformative that assists young people to grow towards their full humanity through an authentic and dialogical engagement with the multiple worlds that shape the human experience (Hargreaves, 2009a; Starratt, 2007).

Through ongoing learning encounters, a moral purpose of education is focused towards enabling the learner to understand their emerging identities and to discern how they can, in relationship with others, contribute to the good of their community (Bezzina, 2012). It is this understanding of moral purpose that guides the exploration of the research question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

Literature Review: Part 2 – System Capacity Building

Part 2 of this chapter presents a review of literature with an interest in whole of system capacity building; to understand how it is conceptualised and enacted by leadership within educational contexts. This thesis agrees with the strongly argued proposition that system capacity building is key to achieving enhanced student learning. However, the focus and purpose of system capacity building, and the way leadership enacts system capacity building, is influenced by the emphasis and direction of the current education reform agenda, and, as will be argued here, this means that the purpose and scope of system capacity building is conceptually limited and unlikely to give attention to the moral purpose of education.

The purpose of this thesis is to provide a deeper understanding of system capacity building and to understand how leaders enable system capacity building. To this end, I

undertook a review of the literature that gave particular attention to whole of system capacity building within different research contexts: large-scale research projects where the whole education system was the unit of analysis; emerging sites of research where particular education jurisdictions were exploring whole of system capacity building; and, particular professional learning initiatives within education systems with a focus on capacity building. The analysis of this literature led to the development of a renewed conceptualisation of system capacity building that brings attention to the purpose and focus of system capacity building and how leadership might enable system capacity building across an education system. It also identified the considerable challenges in enacting system capacity building within the existing structures and mindsets of education reform. This suggests that if system capacity building is to enable a collective commitment to learning for all, focused on enhancing student learning in its broadest and fullest sense, then alternative understandings and ways of enacting system capacity building are necessary that address these identified challenges (Fullan, 2010; Stoll, 2009).

2.4 A Renewed Conceptualisation of System Capacity Building

A focus on whole of system capacity building means giving attention to the whole of the education system. When applied to the context of this study, it means the Catholic education system Melbourne (CESM); that is, all the schools within this particular education systems governance structure, and the central and four regional education offices that serve these schools. Stoll (2009), reflecting on the shift in focus of capacity building from the individual school to the system, makes the following comment:

Parts of the system previously unreached are now as significant as those traditionally paid all of the attention. This means that different parts of the system need to be aligned to provide a coherent and consistent picture and strategy for improvement, and people with diverse roles in the system will have to connect and learn together. (p. 124)

Across the studies reviewed, whether large-scale research across multiple education systems (Mourshed et al., 2010), single education systems (Fullan, 2011a; Harris, 2010), or particular system project initiatives (Katz et al., 2008; Parr & Timperley, 2010), there seems to be a consensus that capacity building with a system focus is key to achieving enhanced student learning. A system focus means the involvement of all within the

system, those within the education offices, the school, and the classroom, need to be connected and committed to this focus of student learning in their daily work.

Part 2 of this chapter offers a renewed conceptualisation of system capacity building which will be progressively developed in stages, with each section contributing to a fully developed conceptual framework at the end of the chapter (Figure 2. 5). The following headings constitute the conceptual framework and are used to structure the chapter:

1. Purposes of capacity building.
2. Capacity building: A focus on individual and system learning.
3. Capacity building: A focus on relationships across the system.
4. Capacity building: A focus on collaborative inquiry across the system.
5. Capacity building: A focus on leadership.

2.5 Purposes of Capacity Building

This section describes the purpose of capacity building and why this purpose is a vital consideration within the broader understanding of whole of system capacity building. Drawing on the research of Stoll (2009) and Stoll, Bolan, McMahon, Wallace and Thomas (2006), *capacity* can be defined as the potential to engage in and sustain activities focused towards a particular purpose, with *capacity building* defined as the actions that enable and increase the potential for sustained engagement towards this particular purpose. Stoll (2009), reflecting on the evolution of her understanding over time, adds that capacity building can be defined as a quality or “habit of mind” that allows people, individually and collectively, to learn from their context across multiple settings, and to translate this learning to new situations as they continue to engage in and sustain activities focused towards a particular purpose. In the context of this thesis, *capacity building* is the sustained engagement with the particular purpose of enhancing student learning in its fullest and broadest sense, described in this study as the moral purpose of education. This requires the collective commitment of all within the system to be focused on learning: their own learning as leaders, and the learning of students. In this way the processes of capacity building explicitly connect leadership to the moral purpose of the system (Bezzina, 2008).

While this discussion begins to frame a renewed understanding of the purpose of capacity building, other scholarly positions place an emphasis on “capacity building with a focus on results” (Levin & Fullan, 2008, p. 295) as the most important element within the suite of reform strategies, with system capacity building identified as a key driver for change. Such views are evident in the large-scale research projects conducted by the global management consultancy of McKinsey and Company (Barber & Mourshed, 2007; Mourshed et al., 2010), in reports by the global organisation, the OECD (OECD 2011), as well as in research by authors like Fullan (Fullan, 2010, 2011a) who cite these studies. Given the expansive scope and influence of such studies in shaping the direction and focus of government education policy and strategy on a global scale, it is important to understand how these studies conceptualise the purpose of capacity building with a whole of system focus. In summary, Fullan (2010) describes capacity building with a system focus as being able to generate a concerted and accelerated force for progress towards reform goals: that is, achieving better measurable results for students. Mourshed et al. (2010) states the purpose of their studies is to understand how education systems build capacity to achieve “significant, sustained, and widespread gains in student outcomes, as measured by international and national standards of assessment” (p. 7). The OECD (2010, 2011), while acknowledging the complexity of education systems and their particular contextual influences, point to their own PISA scores for education as providing credible evidence of system performance. It could be argued that such studies, while bringing attention to a system focus, demonstrate a relentless focus on results moderated within environments of high accountability is the focus of system capacity building, meaning that little attention is given to system capacity building that is actually focused on enabling an expansive and broad moral purpose of education as outlined in Part 1 above.

Hence, while an important shift to a whole of system focus is identified, system capacity building is still being conceptualised within the existing regulatory and narrowly focused education reform agenda. This thesis argues that alternative perspectives on whole of system capacity building are necessary if educational endeavours are to move beyond the emphasis on measurable results and give attention to student learning in its fullest and broadest sense (Hargreaves & Shirley, 2009; Harris, 2010).

The following figure (Figure 2.1) presents the first section of the diagram representing a renewed conceptualisation of system capacity building being developed in this chapter.

This figure brings attention to the purpose of enabling capacity building within the education system.

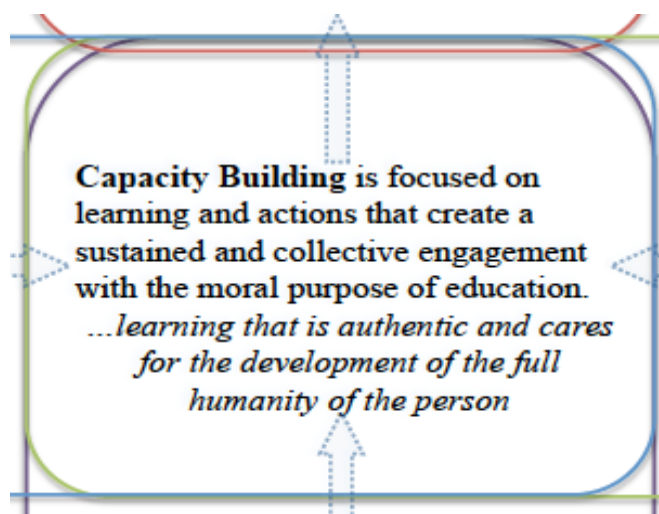


Figure 2.1 Conceptualisation of system capacity building: Section 1.

2.6 Capacity Building: A Focus on Individual and System Learning

In offering a renewed conceptualisation of system capacity building this section address the focus of capacity building. The purpose of capacity building, as outlined above, implies a focus on both individual learning and collective learning, with consideration given to the relationship between individual capacity building and whole of system capacity building. This consideration brings attention to three mutually influencing and interdependent contexts for focusing capacity building; the personal context, an interpersonal or collective context, and an organisational context (Mitchell & Sackney, 2000). In considering how these contexts might be understood, Mitchell and Sackney (2000) suggest taking a “wholeness perspective” in an attempt to create a cognitive shift, a shift from considering these as separate contexts within the whole to connected contexts within a whole of system ecology focused on learning. This is an important insight in framing a renewed conceptualisation of system capacity building, as it begins to shape an understanding of the system as a connected whole that is engaged in collective learning. Such an insight implies a synergy between enabling whole of system capacity building and individual capacity building. As already outlined, Stoll (2009) expresses this synergy by referring to a way of being in the system that enables both individual and collective learning. Fullan (2006) explores this synergy by describing a focus on system capacity building as creating a culture of learning where beliefs, norms, and practices are

expressed, developed, and enacted, *by* individuals and through the purposeful interactions *with* individuals. Harris' (2010) research, focused on the education system in Wales, also adds to this discussion by affirming the importance of interdependent practices where professionals from across the system actively participate in collaborative learning. It is these practices, Harris says, that enable a culture for system learning to take hold. Arguably, a focus on system capacity building brings attention to system wide patterns of learning and interrelationships, where the individual is an active participant in creating these system wide patterns that develop a culture of system learning.

One of the implications of understanding system capacity building as focused on individual learning and collective learning is that the contexts for enabling capacity building are expanded across the multiple layers of the education system. Harris' (2010, 2011) experiences in Wales, and Levin (2007) and Fullan's (2004b) experiences in Ontario, where the focus was on whole of system capacity building, suggest that leaders in these settings were focused on establishing connections across the system; creating opportunities for interaction, communication, and mutual influence. What seemed important is that these leaders become experienced in connecting the multiple layers of the system; working within, between, and across schools, learning communities, and regional and central offices (Fullan, 2004a; Harris, 2010). Working in this way, these leaders expanded their own learning contexts by moving into settings that went beyond their traditional roles, thereby creating opportunities for enabling capacity building – focused on their own learning and the learning of others – to be occurring at all levels of the system. Not only did this way of enacting leadership for learning expand the contexts for learning, it also changed the very context of the system itself (Harris, 2010).

In this renewed conceptualisation of system capacity building, leaders attend to individual learning and collective or system learning in an inclusive and synergistic way for the purposes of enhanced student learning in its fullest and broadest sense.

The following figure (Figure 2.2) presents the second section of the diagram presenting a conceptualisation of system capacity building being developed in this chapter. This figure brings attention to how system capacity has a focus on individual and system learning.

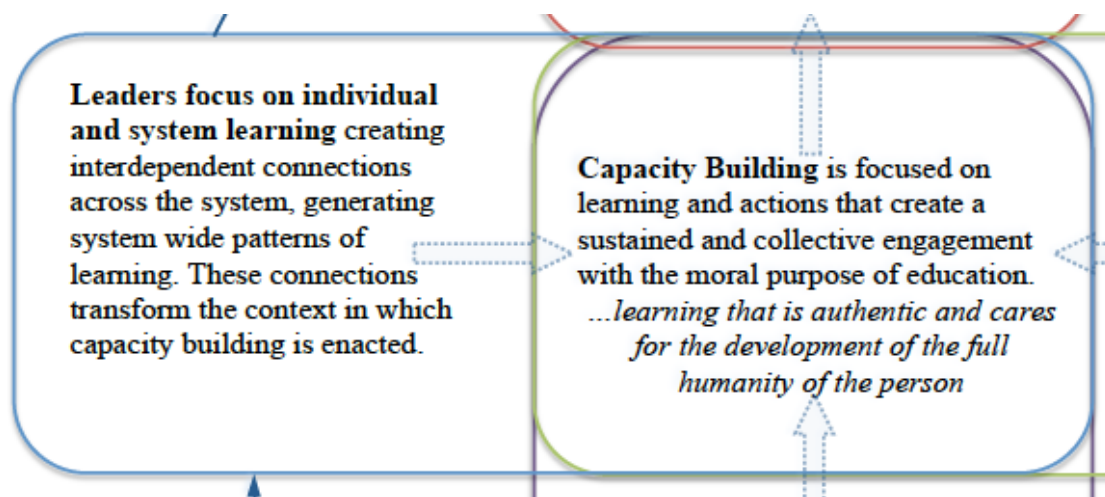


Figure 2.2 Conceptualisation of system capacity building: Sections 1 and 2.

2.7 Capacity Building: A Focus on Relationships Across the System

This section brings attention to how system capacity building is enabled: that is, through a focus on relationships across the system. Relationships within education systems are often understood in the context of the lateral and vertical structures that determine how people are organised into work groups, how information and communication flows, and how patterns of interaction develop across the system (Fullan, 2010). There is a renewed interest within the literature in how these structures are being integrated into educational reform strategies as a way of enabling system capacity building (see for example, Earl & Katz, 2007; Fullan, 2010; Katz & Earl, 2010; Stoll et al., 2006). Scholars with an interest in professional learning communities (PLC) and networked learning communities (NLC), such as Earl, Katz, Elgie, Ben Jaafer and Foster (2006), Harris and Jones (2010), and Stoll and Seashore Louis (2007), suggest these kinds of organisational structures enable the dynamic lateral and vertical interactions necessary for enabling capacity building within education systems. Within these contexts, lateral structures connect across similar levels of the system, for example, a PLC within a level of a school or a NLC of schools within a regional location. While vertical structures are those that connect across different levels of the system, for example, a team consisting of leaders from different layers within the central education office and from within schools. Although neither PLCs or NLCs are a new phenomenon in education systems, they are increasingly becoming a “hot topic”, as Stoll et al. (2006) point out, with attention given to how they might assist capacity building, in particular, collective capacity building within the system. Given that the

emphasis within PLCs and NLCs is on learning – leader, teacher, and student learning – in the context of a community that exists within an education system (Earl et al., 2006; Stoll et al., 2006), it is important, in the context of this thesis, to understand if or how such structures can be conceived as enabling whole of system capacity building and how this might contribute to a renewed conceptualisation of system capacity building being developed here.

This renewed interest in PLCs and NLCs is centred on a shift in the purpose of these structures: A shift from a focus on system alignment and a mechanism for consistent delivery of reform initiatives (Hargreaves & Fink, 2008) to a focus on building learning communities that support collaborative ways of working across the system to enhance student learning (Harris & Jones, 2010). Wales (Harris, 2010, 2011; Harris & Jones, 2010) and Ontario, Canada (Fullan, 2007; Levin, 2012; OECD 2011) are two examples of education systems where leaders are exploring laterally and vertically connected structures as a way of enabling learning communities from a whole of system perspective. These education systems have given particular attention to how vertical structures connect all levels of leadership within the system, where all are involved in the change process as partners at a government level, a district or regional level, and at a local school level through greater collaboration around the core purpose of their work. Both Fullan (2009) and Harris (2010) describe these vertical connections as collaborative partnerships, which open the system to mutual influence and enhanced collective capacity. As Harris (2010) comments, “A core component of the reform process in Wales is the recognition that large-scale change can only occur if all professionals work collaboratively and in partnership” (p. 199). A further example identified in the literature is the education system in Finland, a country often recognised as a beacon in the education reform environment (Hargreaves & Shirley, 2009; OECD 2011). The analysis of the Finnish education system by Hargreaves, Halász and Pont (2008) for the OECD, suggests networks are established to enable those within the education system, and beyond, to learn and work together through opportunities for multiple and nonlinear connections. These networks are deliberately created to foster relationships of responsibility, cooperation, and trust, and highlight a strong culture of lateral and vertical teamwork, participation, local target setting, and self-evaluation. As the report noted “ From the classroom to the Ministry of Education, this trinity of terms [responsibility, trust and cooperation] was reiterated...many times as the key factor that explained performance,

problem solving, improvement and accountability” (p.82). The hallmark of these networks in Finland is the importance of human relationships, thereby creating a culture of high-trust and professional cooperation. These examples of education systems, where there is a deliberate focus on laterally and vertically connected relationships as a way of enabling system capacity building, are emerging as important sites of learning.

However, it is evident from the research of scholars with an interest in how vertically and laterally connected structures enable capacity building across the system (see for example, Harris & Jones, 2010; Katz & Earl, 2010; Katz et al., 2008; Stoll et al., 2006; Stoll & Seashore Louis, 2007) that the main focus is on within school contexts and across school contexts within regions or districts. While Fullan (2005) advocates for connected structures like PLCs to extend beyond the school community and to include the system as a whole, and Harris (2010) argues that PLCs are essential for enabling the capacity for whole of system change, there are only a few examples of education systems, like the ones described above, with connected lateral and vertical organisational structures that have a clear whole of system focus. Within the literature reviewed, limited attention was given to PLCs or NLCs within the education offices, or PLCs or NLCs across school settings that included leaders from the education offices. It can be argued that education offices and leaders within education offices are either not included within the construct of vertically and laterally connected relationships within the education system or their role is not explored. This identified gap in the literature will now be addressed.

While the studies reviewed (see for example: Earl & Katz, 2007; Katz et al., 2008; Sammons, Mujtaba, Earl, & Gu, 2007; Stoll et al., 2006) recognised the need for all levels of leadership to be participating in PLCs and NLCs, the reference to “all levels” (Stoll et al., 2006, p. 235) generally meant within and across schools, and did not include leaders from education offices. Katz et al. (2008) commented on the relationship between leadership in the education offices (referred to as system leadership) and the network in this way: “Networks have some system leadership to direct the work of the network itself, which usually coexists alongside formal leadership of head teachers in schools” (p. 120). In this example, leaders from the education offices were understood as “directing the work” or “coexisting alongside” rather than participating in the learning with other leaders from school settings. It is the absence, however, of specific attention given to the engagement of education office leaders within the broader understanding of PLCs and

NLCs that is noticeable. For example, the review by Earl et al. (2006) of the *Networked Learning Communities Programme* in England highlights the following as important within these NLCs: joint work that challenges thinking and practice for both schools and the networks; collaborative inquiry for enabling change in practice; and, the necessity of formal and distributed leadership. However, it is not clear within this review how leaders in education offices are connected to this work or learning from this work. Detailed attention is given to enabling capacity building within schools, however if system capacity building is to be understood beyond the collective of schools in the system, then consideration needs to be given to leaders within education offices. It can be argued, thus, that lateral and vertical connections, like PLCs or NLCs, are generally not understood as a way of enabling capacity building within the education offices of the education system. This indicates a gap within the research literature, and suggests that, if *whole* of system capacity building is to be understood, research that investigates the possibility for dynamic lateral connections *within* education office settings, and vertical connections *across the layers* of the education office, including connections to schools, is needed.

This identified gap in the literature may suggest that the challenge of enabling dynamic lateral and vertical connections, focused on capacity building across the system, arises because these connections often traverse the established bureaucratic and hierarchical structures of the education system, and that these structures are difficult to change. This suggestion is supported by Rusch (2005) who identifies how difficult it is to disrupt the managerial processes and cognitive scripts that underpin such hierarchical structures within organisations, and how they can become barriers to the development of learning relationships within organisations. Earlier in this chapter it was argued that such organisational structures are the mechanism by which accountability and a focus on system performance results, are maintained and, hence, well established within the current education environment. Given the influence of these established organisational structures within the education system, the impact they have on the purpose of capacity building and, in turn, the learning relationships within the education system, these structures will now be explored.

Harris (2011) suggests that in such hierarchical environments, where there is a strong focus on accountabilities cascading from the top, the vertical relationships within the education system are often based on intervention and top down control from a central

bureaucracy or education office. Hargreaves and Shirley (2009), in defining a *Fourth Way* of educational change, suggest such relationships give power and agency for capacity building to the bureaucracy, rather than in a collaborative partnership between the different levels within the system. Levin (2012), drawing on his experiences of education reform in Ontario, advises: “if a system is too hierarchical or depends too much on direction from the top, the full contribution of all parties will not be achieved” (p. 28). In these hierarchical environments, the role of leadership in the central bureaucracy or education offices is often interventionist. This is evident in the report by Mourshed et al. (2010), where they define clusters of interventions that leaders in education systems should use if they are to successfully traverse from one performance stage to the next. Such interventions, as outlined by Mourshed et al. (2010), are often directed towards delivering professional learning to schools and presenting scripted approaches to implementing system strategy and pedagogical change (Hargreaves & Shirley, 2009). These kinds of vertical relationships are particularly prevalent in education systems described as poor performers, with a correlation between an education system’s performance level and the degree of tightness of bureaucratic control over a school’s improvement process (Mourshed et al., 2010). In these settings, the work of leaders and the focus of capacity building is centered on raising the floor of performance and delivering results within short time frames. Only when education systems are deemed to be at a higher stage of performance are collaborative and flexible approaches supported by the central bureaucracy (Mourshed et al., 2010). However, Levin (2012) and Hargreaves and Shirley (2009) warn against such segregation and take a view that the enormous diversity within schools, and across the system as a whole, means a collaborative approach, and a collective responsibility towards improvement, is the necessary mindset – an idea that is supported by Hargreaves et al. (2008) in their review of the Finnish education system. A key message from this analysis of the system was the application of the principles of social justice, challenging the idea of segregation and promoting the ideal of welfare and improvement for all children and their local communities through the enactment of: “the strong helping the weak within and beyond school’s immediate communities” (p. 99). These insights are of particular interest to the focus of this thesis, as the *Leading for Learning* project, the context for this study, exemplified both vertical and lateral connections within and across the education offices and schools as a way of enabling capacity building within the system. However, the decision to end the project prematurely asserted the presence of a powerful,

interventionist and vertical organisational structure.

This discussion on the nature of connections within education systems suggests that when these relationships are based on authority and positions of power, and manifest in leadership that is interventionist, they present a challenge, not only to the development of lateral and vertical connections that promote relationships of mutual influence, but also to the establishment of collaborative learning communities that are focused on learning for all across the system (Harris, 2008; Rusch, 2005; Vescio, Ross, & Adams, 2008). While some education systems are beginning to reimagine the way these structures enable collaborative partnerships, it is suggested that further research is needed regarding the conceptualisation of vertical connections across the education system as a *whole* and how these might enable system capacity building: that is, how learning relationships of mutuality and partnership, rather than authority and power, enable system capacity building (Harris, 2010; Levin, 2012; Rusch, 2005). As Rusch's (2005) study, focused on relationships between network members and the members of the broader education system concluded, "The findings ... point to an acute need for a better understanding of how systems learn" (p. 115), as these potential relationships of learning remains largely unexplored territory.

The following figure (Figure 2.3) presents the third section of the diagram presenting a renewed conceptualisation of system capacity building being developed in this chapter. This figure brings attention to how system capacity building has a focus on enabling relationships centred on learning for all.

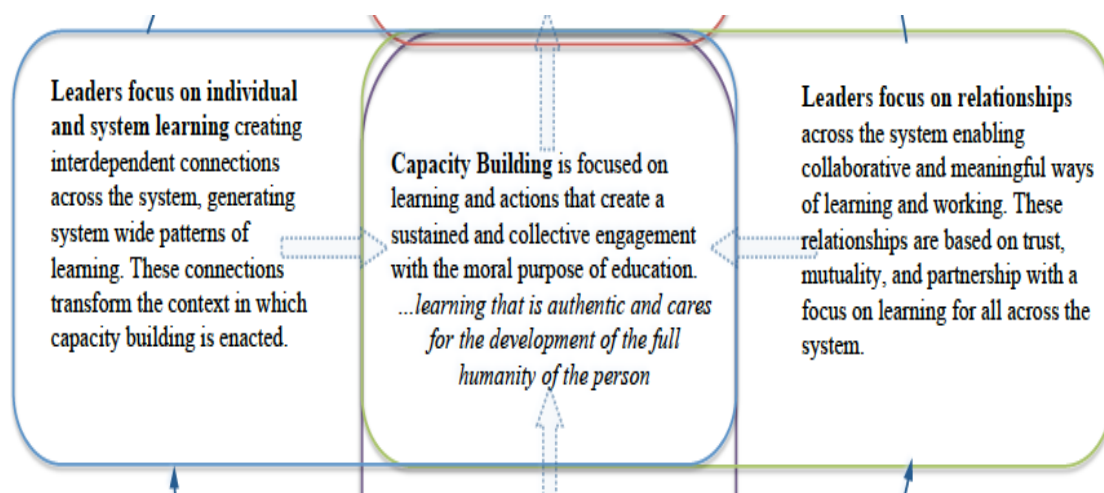


Figure 2.3. Conceptualisation of system capacity building: Sections 1, 2 and 3.

2.8 Capacity Building: A Focus on Collaborative Inquiry Across the System

This section describes how collaborative inquiry is central to system capacity building and to enabling the necessary relationships outlined above. Specifically in offering a renewed conceptualisation of system capacity building, consideration is given to the *process* of enabling capacity building: that is, the ways of working in the system that focus on sustaining learning for all people, at all levels of the education system, for the collective purpose of enhancing student learning in its broadest and fullest sense (Stoll, 2009). Much of the literature addressing the processes of collaborative inquiry (see for example, Harris & Jones, 2010; Katz & Earl, 2010; Parr & Timperley, 2010; Stoll et al., 2006; Stoll & Seashore Louis, 2007; Vescio et al., 2008) is focused on PLCs. The research findings from these studies confirm that leaders and teachers working collaboratively, with an inquiry orientation, and with an absolute focus on student learning, is what matters most if system wide capacity building is to be achieved and ultimately, improves student learning. It is studies like these (referenced above) that are providing the catalyst for developing *system wide* collaborative and inquiry focused ways of working that enable system capacity building.

Collaborative inquiry with a focus on enabling capacity building, is essentially about learning; the learning of students and teachers within schools (Katz & Earl, 2010), and as this thesis argues, learning within the system as a whole. Katz and Earl (2010) describe collaborative inquiry as intensive interactions that engage educators in exploring their beliefs and practices, through processes of interpretation and evaluation of practice, thereby enhancing their own knowledge and practice and that of their colleagues. They suggest such a way of working cultivates a “habit of mind” (p. 31): that is, a way of thinking and being that fosters dynamic and iterative processes for exploring ideas, seeking understanding, and developing collective meanings. Vescio et al. (2008) describe how this kind of collaboration “opens up the practice in ways that encourage sharing, reflecting and taking the risks necessary for change” (p. 84), so that there is a willingness to address the hard questions about practice and to explore these with others (Harris & Jones, 2010). While each of the studies reviewed identified various key characteristics of collaborative ways of working, they all recognised trusting relationships as foundational if people were to engage in, what Stoll (2006) called, the risky activities of learning through inquiry. These relationships, described by Katz and Earl (2010) as the “connective tissue” (p. 30) of NLCs, build trust and enable people to work together in environments where

different orientations and views can emerge. What is of interest to this thesis is how this understanding of collaborative inquiry might be enacted across the system as a whole.

Collaborative ways of working and being in the system, scaffolded by an inquiry orientation to change, and with a bias towards action, can disrupt the more established ways of working in the system (Harris, 2012; Levin, 2012). It can be argued that attending to these priorities of collaboration and inquiry, leadership actively reshapes the patterns of interaction and relationships within and across multiple layers of the system, thereby creating the potential for new ways of thinking, working, and being to develop within the system. Leaders in education systems, like Wales and Ontario, are providing insight into how they are developing a culture of whole of system capacity building through collaborative inquiry (Katz & Earl, 2010).

In Wales, leaders have centered their efforts on connecting all layers of the system through collaborative partnerships as a way of enabling a system focus on learning (Harris, 2011; Harris & Jones, 2010). This is premised on belief that there must be opportunities for professionals to collaborate, co-create, and co-produce new knowledge and practice through processes of inquiry. This inquiry way of working across the system has provided a catalyst for change, as knowledge and practices become more widely available to others in the system (Harris, 2010). In particular, leaders in Wales have given attention to interdependent practices, which they describe as leaders “enabling” rather than “doing” (Harris, 2010, p. 201) bringing attention to the collective responsibility that all within the system have to be enabling learning for students. In Ontario, while leadership set core priorities and strategies for education reform, it was the underlying principles that ensured significant and sustainable change. Leaders demonstrated the following: a respect for professional knowledge, an understanding of schools as ecologies by paying attention to the whole and rejecting narrowly defined foci and, a commitment to building relationships and connections across the whole system (Fullan, 2009; Levin, 2007). These enactments of leadership framed the approach to system capacity building, with an emphasis on the way people connected, communicated, and collaborated across the system.

While there are only a small number of studies that explicitly give attention to collaborative and inquiry focused ways of working from a whole of system perspective

(Harris, 2011), there are numerous examples of research (see for example, Honig, Copland, Rainey, Lorton, & Newton, 2010; Parr & Timperley, 2010; Rusch, 2005; Vescio et al., 2008) where this way of working is explored within specific project initiatives within a region or district of an education system. These sites of research provide important additional insights into how collaborative inquiry can be understood within education system contexts, as well as some of the challenges associated with this way of working and learning. Parr and Timperley's (2010) literacy professional learning project, designed to engage all levels of leadership in an inquiry into practice, concluded that such leadership participation was necessary for enhanced student learning: "The policy and project leadership level in this project utilized previous learning and put in place structures to maximize the support and inquiry processes both of themselves and others" (p. 169). Rusch's (2005) study exploring a network structure within an education system highlights the importance of professional conversations for developing a culture of learning, characterised by an openness to learning, mutual trust, and inclusiveness of diverse perspectives. In particular, Rusch found that inquiry-based professional conversations created connections between individuals and fostered a sense of belonging in the learning community, creating interdependencies across the system more broadly. A further example is from the *Central Office Transformation* study (Honig et al., 2010), one of the few studies focused specifically on the ways of working within an education office setting. This study identified the necessity for a continuous focus on learning that made lasting changes to the daily work practices of leaders in the education office. They emphasised that this involved more than restructuring work units, redefining roles or accountability systems, but rather the focus needed to be on new ways of working together where, "the importance of people 'learning their way into the work' as it unfolds cannot be overemphasized" (p. 13). These studies demonstrate the possibilities of collaborative inquiry within education offices and how education office leaders might be engaged in this kind of work and learning. It can be argued that these ways of working have the potential to create a culture of system learning that nurtures not only a professional way of being but also cultivates a way of *being across the system* as a whole (Harris, 2011). Hence, this thesis is interested in exploring how collaboration and mutual inquiry across multiple teams and contexts within the whole of the education system enables collective capacity building across the system.

These professional learning projects, PLCs, and NLCs within education systems do not

exist in a vacuum and, thus, the development of a *way of being across the system*, centred on collaborative and inquiry focused ways of working, can present challenges. This is particularly evident when the way of working in the broader system environment is underpinned by principles drawn from the current education reform environment, as outlined in Part 1 of this chapter. Each of the studies referenced above, including Wales and Ontario where there is a whole of education system focus, identified challenges associated with developing collaborative and inquiry focused ways of working. In reflecting on the experiences in Wales, Harris (2010) suggests one of the reasons why such whole of system approaches to change can be “thin on the ground” is because “at all ...levels of the system powerful boundaries and fault lines exist.... and can present considerable challenge to the process of implementation” (p. 203). Issues of power and control can come into play when collaborative and inquiry-based partnerships are being developed as they have the potential to threaten status and position, thereby distracting the efforts to embed new ways of working in the system. Rusch (2005) confirms this view by highlighting how difficult it was to disrupt the deeply embedded scripts present in the education district when efforts were being made to translate learning beyond the network. In particular, Rusch’s study identified a number of barriers to expanding the ways of working and the learning established in the networks more broadly within the system. These included: district leaders fearing rivalry and competition within the education district; district leaders remaining silent on the achievements of the networks, thereby isolating and marginalising the network leaders; silence on cross system talk about complex change and developing cultures of learning, meaning that the district leaders only gained assumptive understandings about the learning happening in the networks; network subcultures, thereby contradicting the accepted culture in the district; and, unfettered professional talk about the learning from the networks that challenged practices and structures of the district, this was uncomfortable for some district leaders as they were not able to control the flow of information in the district. These findings from Rusch’s study are particularly interesting in relation to this thesis as the *Leading for Learning Project*, the context for this thesis, experienced similar barriers within CESM when seeking to translate the learning from the project more broadly across the system.

As discussed in Section 2.7 *Capacity Building: A Focus on Learning Relationship Across the System*, there are some notable challenges in sustaining collaborative inquiry within education systems as these ways of working can disrupt existing structural relationships

within education systems that are often vested with power and control (Hargreaves & Shirley, 2009). In the absence of dynamic connections and opportunities for professional talk across the system that create networks for whole of system learning, the likelihood of learning translating across the system more broadly is diminished (Harris, 2011; Harris & Jones, 2010; Rusch, 2005). The emerging sites of research in Wales and Ontario, as highlighted throughout this discussion, identify that the most important consideration in enabling whole of system collaborative inquiry is that it requires the collective commitment of *all* leaders in *every* setting within the system to lead this kind of approach in enabling system capacity building. If collaborative inquiry is going to enhance the capacity building of leaders and teachers across the system, and thereby address the multiple contexts and influences on student learning, then, as Harris (2010) says, leaders will need to be able to work within, between, and across school and education offices, working together in new ways to create a new cultures of system learning. Thus, the next section (Section 2.9) explores the nature and practice of leadership and how leadership can build system capacity by supporting and sustaining collaborative inquiry across a whole system.

The following figure (Figure 2.4) presents the fourth section of the diagram representing a conceptualisation of system capacity building being developed in this chapter. This figure brings attention to how capacity building has a focus on collaborative inquiry.

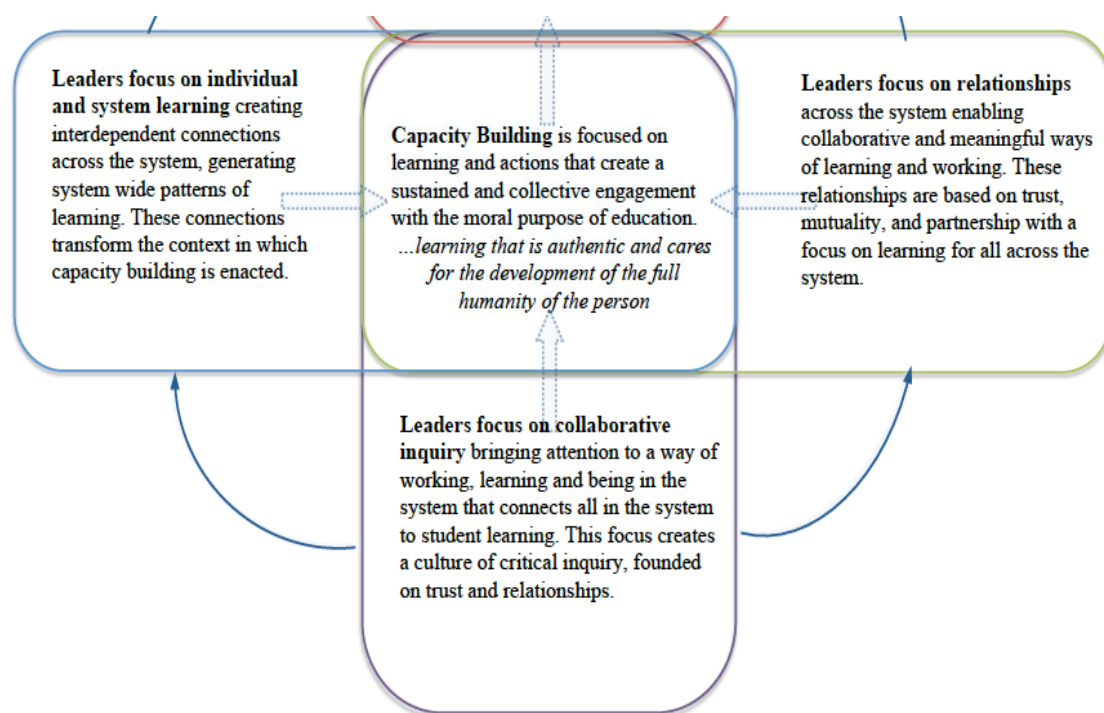


Figure 2.4. Conceptualisation of system capacity building: Sections 1, 2, 3 and 4.

2.9 Capacity Building: A Focus on Leadership

The final section of Part 2 of this chapter is focused on how leadership enables system capacity building within lateral and vertical connected groups within education systems: that is, within groups like PLCs and NLCs, as discussed above. While the enactment of leadership has been highlighted in all the sections above, this section will give particular attention to positional leadership and shared leadership¹ and how this kind of leadership offers possibilities for enabling system capacity building. A further review of leadership literature will be undertaken in Chapter 3 where the focus will be on leadership within complex adaptive systems.

There is considerable agreement across the empirical studies reviewed (see for example: Earl & Katz, 2007; Earl et al., 2006; Spillane & Timperley, 2004; Stoll, 2009) that, in complex environments like PLCs and NLCs, leadership is not what one person can accomplish or fully understand, nor is leadership bound to a particular location or role, but rather it is multidimensional in nature and enacted by many people within these settings. Stoll et al. (2006) draw attention to this when they describe leadership with PLCs as: “The potential that a range of people based inside and outside a school can mutually enhance each other’s and pupils’ learning as well as school development” (p. 223). As has been established in the preceding sections, there is a stronger emphasis in the literature on how leadership enables capacity building within school and across school settings, with some emerging sites of research that bring attention to the leadership of both education office leaders and school leaders, and how, in collaborative partnership, they might contribute to whole of system capacity building. This last section brings attention to positional and shared leadership within education systems to understand how these leadership constructs influence capacity building and, in turn, offer insight into the renewed conceptualisation of system capacity building within the *whole* of the education system.

2.9.1 Positional leadership in learning communities.

Positional leadership (people with designated roles of leadership) was identified as having a critical role in facilitating connections on multiple levels within learning communities,

¹ In studies reviewed leadership was described as distributed, collaborative, co-leadership and shared, for the purposes of clarity in this discussion these forms of leadership will be referred to as shared.

for example: facilitating the translation of practices and learning between the school and the PLC or NLC; connecting the work of these learning communities to the broader education system priorities, as well as the local priorities of the school; and, where necessary, protecting the network from external pressures. Katz et al. (2008) reported, in their study on *Network Performance Based Schools in Canada*, that positional leadership was critical in facilitating schools' connections to the network so as to enable practices like collaboration and inquiry to translate between the school context and the network context. Earl et al. (2006) suggested that positional leaders acted as "boundary spanners" facilitating change in both the networks and the school setting and fostering the conditions necessary for changes in thinking and practice in both settings. These leaders were also able to offer a "big picture" view, thereby bringing attention to policy and priorities of the education system, as well as highlighting the local priorities of the network and the school, and how these might be understood within the broader context (Earl & Katz, 2007; Stoll et al., 2006). As one leader in Earl and Katz's (2007) study commented, "My leadership role is to hold and capture a broad picture of possibilities, present them and support the decisions that come out of that" (p. 247). Such actions by positional leaders were described by Earl and Katz (2007) as "setting and monitoring the agenda", where the role of positional leaders was understood as ensuring the work had a purpose and focus. This seemed to be important if the PLCs or NLCs were to be effective in addressing the important issues of teaching and learning, otherwise, as Harris and Jones (2010) comment, they can be perceived as "just be an extra activity – [rather] they need to be carefully positioned within the school so that they link with other developments in an integral and coordinated way" (p. 179). Another aspect of this role, identified by Harris and Jones (2010), was to ensure that the learning communities were not buffeted by competing demands and challenges from the broader educational environment. In their pilot study of PLCs in Wales, Harris and Jones found this to be a major challenge for schools, which in turn put pressure on the PLCs. This highlights again the difficulties faced by leaders in sustaining collaborative ways of working in the existing organisational culture of education systems. Overall the findings suggest the importance of positional leadership in providing connectivity and coherence across multiple settings: the school, the learning community, and the broader system context, but with the inherent challenge of sustaining the learning within the ever changing context of the broader education environment.

Positional leaders also exerted influence *within* learning communities by actively enabling the learning of others - fostering and sustaining learning for both adults and students (Stoll et al., 2006) , as well as being deeply involved in the learning themselves (Hargreaves & Fink, 2008). This included encouraging others to not only participate in the learning, but to take the lead in these communities. Stoll et al. (2006), in their review of PLCs, identified how positional leaders in school contexts were essential in nurturing a disposition for learning and, in particular, an inquiring mindset, by encouraging learning focused experiences, such as, reflection, open discussion, feedback, and collaboration. In essence positional leaders, in these settings, focused on people and their learning and they participated in the learning. These enactments of leadership were particularly important when collaboration met with resistance, as they could champion the work of these communities and the underlying purpose of enhanced student learning (Harris & Jones, 2010).

In summary, studies undertaken by Harris and Jones (2010), Katz et al. (2008), and Stoll et al (2006) identified the following intentional practices by positional leaders as important if learning communities were to thrive: connecting to a sense of purpose; fostering sustained learning for both teachers and students; developing norms of continuous critical inquiry; encouraging research across the school and seeking out external research; focusing on people and relationships; and, fostering trust and respect as the foundation for experimentation and taking risks . In their final analysis, Harris and Jones (2010) suggest that supportive and focused positional leadership is critical if professional collaboration is to flourish and thereby contribute to improved learning for students. However, as has been noted, these studies are focused on positional leadership in learning communities within school contexts. It would be interesting to understand how these enactments of positional leadership might manifest within the educational offices and, moreover, how the construct of positional leadership might be understood from a whole of system perspective. This line of inquiry reiterates the need for research that focuses on leadership that has a whole of system perspective, how this leadership might be described, and how it might influence system capacity building.

2.9.2 Shared leadership in learning communities.

Shared leadership is understood as leadership practices enacted by multiple people across

a particular setting or settings that positively influence the actions, beliefs, and values of others, and in turn, the learning culture of the setting (Earl & Katz, 2007; Stoll et al., 2006). This conceptualisation of shared leadership signals a shift in focus from the person as leader, to the multiple and dynamic practices of leadership that are contextually situated (Spillane & Timperley, 2004). Shared leadership within PLCs and NLCs was identified as important, as the work in these settings was too complex for the domain of one person. In particular, inquiry-focused collaboration, characteristic of these learning communities, presented challenges that required the engagement and expertise of many people, thereby offering a broader leadership base to the setting (Earl & Katz, 2007; Stoll et al., 2006). Of interest in these collaborative settings was how leadership was shared and how the influence of shared leadership occurred within the complex and often fluid arrangements of PLCs and NLCs (Spillane & Timperley, 2004). For example, Earl and Katz (2007) comment:

The role of leaders in this more complex configuration is not bounded by the school or the network boundaries and the roles that people play bleed across the two domains in almost indiscernible ways.... what may be different [about shared leadership] is how that influence is exercised and to what ends. (p. 255)

Of particular interest to this thesis is how leadership is shared, not only beyond the school and within the network, but also within the education offices and across the education offices and PLCs and NLCs, thereby providing an understanding of shared leadership from a whole of system perspective, and how this kind of leadership might enable system capacity building.

Leadership was recognised as shared beyond the positional leader when the following practices were undertaken by non-positional leaders: leading teams or projects; supporting colleagues; making connections between the network and the school; sharing expertise; learning with and from each other; and, participating in collaborative groups (Earl & Katz, 2007; Stoll et al., 2006). Interestingly, as Katz and Earl (2007) comment, these shared leadership roles were often founded on relationships, rather than roles that were defined by the exercise power over others. An example of shared leadership tendered by Stoll et al. (2006), from their review of PLCs, was principals and teachers collaborating on joint inquiries, with teachers taking the lead to initiate change and influence the practice in their setting. However, those engaged in these shared leadership practices did not always describe what they were doing as enacting leadership (Earl & Katz, 2007).

This insight is supported by Dawson's (2011) study on teacher leaders, where there was a reluctance by teachers to describe their actions as leadership or to think of themselves as leaders. Those scholars exploring how leadership enables whole of system capacity building like Harris and Fullan and Levin are very clear about the necessity of leadership beyond positional leaders. For example, Harris (2010) comments that, when "sharing leadership more widely, the opportunities for releasing learning capacity with schools and across the system is maximized". Furthermore, Levin and Fullan (2008) suggest that, if there are enough leaders across the system collectively engaged in promoting mutual interaction and influence within and across all levels of the system, then the system itself changes. Given the importance of leadership being enacted by multiple people within and across multiple settings, then further consideration needs to be given to the practice of this kind of leadership, and how it might be acknowledged and fostered across the system as a whole.

In identifying the importance of shared leadership in learning communities, challenges were also recognised in enacting this kind of leadership across various settings within education systems. Earl and Katz (2007), in their study on the essential features of NLCs, identified that while multiple people were enacting leadership, positional leadership was still firmly in charge. In these settings, the clear role boundaries and functions of positional leadership were maintained, while concurrently enabling shared leadership to also be influential. It seems these settings benefited from the diversity of ideas and collaboration afforded by shared leadership while also maintaining the existing power relationships and stability of the positional leadership (Earl & Katz, 2007). However, leaders in these NLCs recognised there was an absence of conflict or disagreement within these settings, suggesting that the firmly established positional leadership reduced the opportunities for difference of opinion and perspective that could be expected when leadership was shared (Earl & Katz, 2007). When these leaders were asked about how tensions or conflicts were negotiated within the NLCs they could not think of any examples. This finding raised questions for the researchers about how conflict or disagreement within collaborative environments was understood, and whether conflict was considered a nuisance or understood as productive in progressing the work of the learning communities. Earl et al. (2006), drawing on Little's (2005) work, confirm that diversity of view and conflict are important for professional growth. Harris (2010) adds to this view and suggests that, at best, learning communities should "disrupt the status quo,

to create the possibility of knowledge creation and to stimulate change in the daily work of professionals, where they are located in the system” (p. 202). This suggests that shared leadership, in these dynamic group environments, is important in enabling robust learning communities, as it brings to the fore different perspectives (Stoll et al., 2006), and thus, more likely to disrupt established relationships invested with power and control. In Earl and Katz’s (2007) study of leadership within networks, this was particularly evident and became challenging when decisions crossed boundaries between schools or involved leaders of similar authority. Leaders trying to negotiate this new terrain experienced conflict and uncertainty, and this resulted in some leaders becoming fatigued in relation to their work (Earl & Katz, 2007; Stoll et al., 2006). As Earl and Katz (2007) comment, “Establishing patterns of distributed leadership can be a subtle dance of power and authority, with no rules” (p. 256).

This discussion, while identifying the importance of shared leadership in PLCs and NLCs, highlights the challenges of enacting shared leadership, as such leadership begins to reshape relationships and connections across the system. This signals the need for further investigation into *how* leadership is shared in practice and, in particular, how it is shared across the system as a whole where there are defined organisational roles and boundaries. These investigations will be important if leaders across the education system, as Harris (2010) suggests, are to “support the collective capacity building at national, local and school levels... [as this] will require leaders who are able to work within, between and across schools and local authorities” (p. 204).

The following figure (Figure 2.5) is the final diagram offering a renewed conceptualisation of system capacity building that has been developed throughout this chapter. The diagram brings attention to a definition and purpose of capacity building developed earlier in the chapter, with the three important foci for leadership in enabling capacity building: a focus on individual and system learning; a focus on building relationships; and, a focus on collaborative inquiry. The diagram now includes a statement offering a conceptualisation of system capacity building that has been synthesised from the review of the literature in this chapter.

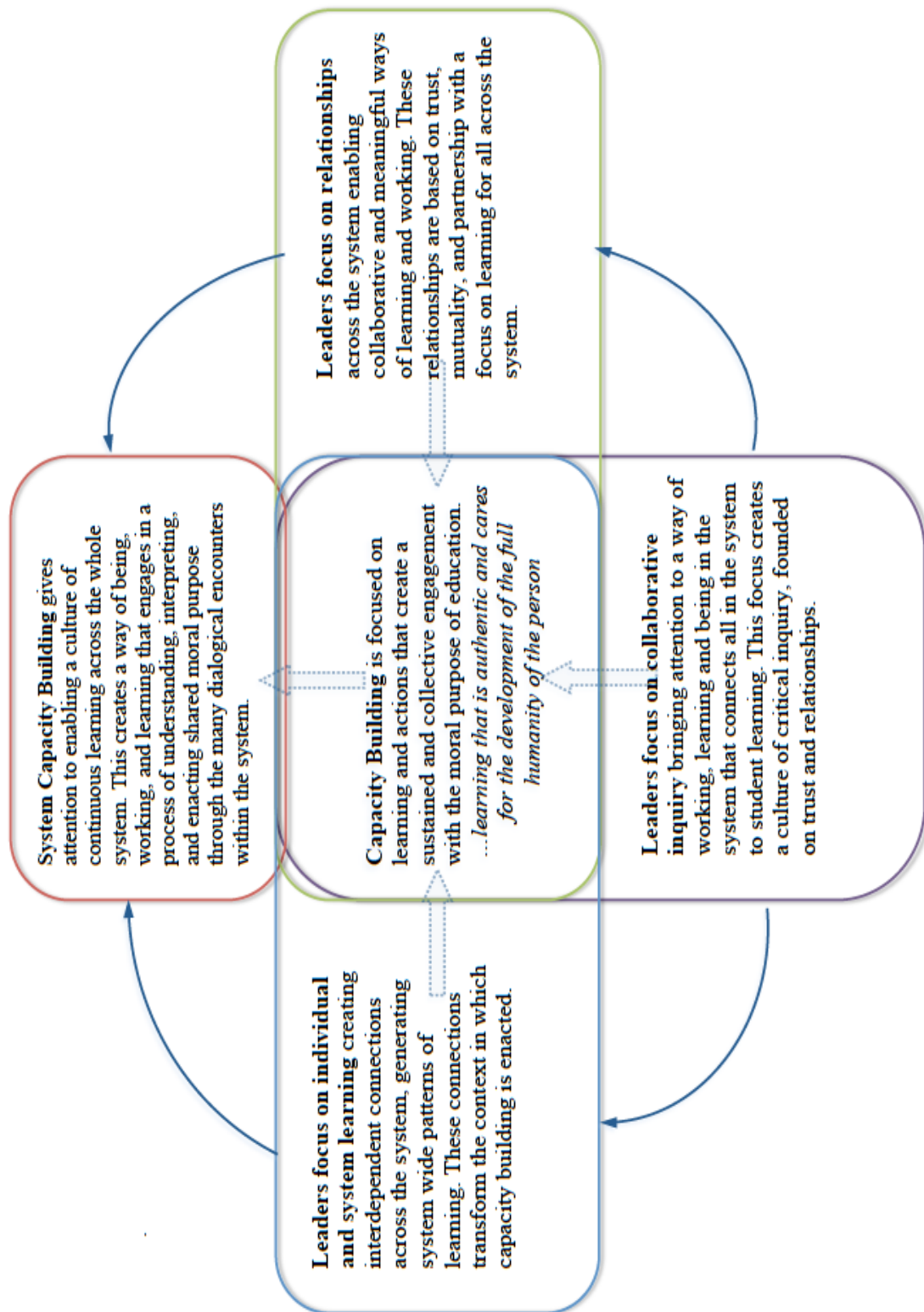


Figure 2.5. A Conceptualisation of system capacity building: Complete diagram.

This synthesis of the literature offers a conceptualisation of system capacity building as a process that gives attention to enabling a culture of continuous learning within the system. A focus on system capacity building creates a way of being, working, and learning within the education system that engages in a process of understanding, interpreting, and enacting shared moral purpose through the many dialogical encounters within the system. In enabling system capacity building, leadership attends to, and participates in, the following: individual and system learning; enabling relationships; and collaborative inquiry that focused on ways of working and learning. These leadership actions, and ways of being, are focused on creating a sustained and collective engagement with the moral purpose of education. In the context of this thesis, this is understood as learning that is authentic and cares for the development of the full human person.

The empirical studies reviewed in this chapter established that it is *possible* to conceive of this renewed conceptualisation of system capacity building. This conceptualisation is evident in the framework developed over the course of this chapter. However, the review also identified the considerable *challenges* of enacting system capacity building within the current education reform environment. In particular, the education offices and leaders within these settings were often ignored in framing an understanding of whole of system and, therefore, it was often unclear how they might benefit from, and participate in, the processes of enabling system capacity building. For example, challenges were identified when relationships within the education system were framed around power and intervention, making it difficult to conceive of relationships of mutual influence and trust which are necessary for enabling a culture of system learning. Also, challenges arose when efforts to develop a *way of being across the system*, centred on collaborative inquiry, traversed the dominant structures and mindsets of the education system and, therefore, seemingly threatened the stability of the education system.

In summary, this understanding of system capacity building, developed throughout this chapter, and presented in the figure above, focuses on renewed ways of being, working, and learning across the whole education system. However, in doing so it has the potential to disrupt the established structures, relationships, and purposes of the education system, embedded within the regulatory and performance mindset of contemporary education reform. Thus, it is acknowledged that the understanding of system capacity building developed here, may present challenges when enacting this across the system as a whole.

Rather than this being a constraint to its adoption, it is argued that effective system capacity building may well depend on this very disruption to the system, that this understanding affords.

2.10 Conclusion

The purpose of this chapter was to present a review of the literature that gave particular attention to whole of system capacity building and how leadership enables system capacity building, thereby offering a renewed conceptualisation of system capacity building. While it is possible to conceive of system capacity building, such a way of being, thinking, and working in education systems presents considerable practical challenges, as it disrupts the established structures, relationships and purposes of education systems. System capacity building, as conceptualised in this chapter challenges the regulatory and performance mindset of education reform.

Despite this conclusion, this thesis argues for alternative perspectives and enactments of system capacity building that open up possibilities for other ways of thinking, working, and being within education systems that transcend the existing regulatory and performance mindset of the current education environment. Arguably, system capacity building needs to be viewed through a new lens if it is to break free from its existing constraints and limitations and, thereby, become effective. To this end, the following chapter provides an exploration of education systems, system capacity building, and leadership from perspectives drawn from the field of complexity theory and, in particular, complex adaptive systems. This is new territory for understanding education systems (Jäppinen, 2014) and offers a fundamental shift in worldview: a shift from viewing the system as complicated, certain, and stable to a view of the system as complex, emergent, and relational (Snyder, 2013). As Margaret Wheatley (2006) comments, “When we view systems from this perspective, we enter an entirely new landscape of connections, of phenomena that cannot be reduced to simple cause or effect, or explained by studying parts as isolated contributors” (p. 10).

The following chapter will present this alternative perspective.

Chapter 3

Literature Review: Education Systems as Complex Adaptive Systems

The previous chapter argued that the current neoliberal paradigm, influential in shaping views about the purposes and functions of education systems, and the work of leadership within these systems, constructs a limited conceptualisation of the purpose and scope of system capacity building. It was argued that such a paradigm marginalises the possibility of an expansive education purpose that focuses on learning that is authentic and cares for the development of the full human person. The chapter also outlined the challenges of developing the necessary collaborative and inquiry focused ways of working, being and learning in the education system, as such relationships, and the ensuing learning, disrupted the established structures and authority that underpins the regulatory and performance mindset of education systems. Given the limitations and challenges that this mindset presents in enabling system capacity building, the purpose of Chapter 3 is to explore alternative perspectives and enactments of system capacity building by engaging with complexity theory and, in particular, complex adaptive systems.

The field of complexity science is emerging as an influential contemporary organisational theory (Hames, 2007; Preiser & Cilliers, 2010). In this thesis I will use this emerging field of research as a way of exploring a conceptualisation of education systems as complex adaptive systems and system capacity building as a complex and emergent process. It is important to note that, from the broad and diverse scholarship of complexity theory, I will be drawing on research focused on complex adaptive systems with a particular interest in human social systems, like education systems, and where researchers generally engaged in qualitative methodologies to understand the experiences and actions of those in a range of organisational settings. This will be explained in more detail later in the chapter. The suitability of applying complexity theory as the theoretical framework for this study are now outlined from the organisational perspective, the system perspective, and the human capacity perspective:

- Organisations, like education systems, are understood as complex, dynamic, adaptive, and emergent human social systems constituted of many interactions and

relationships (Uhl-Bien & Marion, 2009). This is in contrast to organisational theories that understand organisations as complicated, predictable, and linear based human networks that can be controlled (Hamel, 2007). Complexity theory offers a new conceptual lens by which to understand education systems and to explore the work of leaders within the system (Synder, 2013).

- The education system, as a complex system, is understood as an open, dynamic, and connected *whole* constituted of a web of relationships (Capra, 2002). When the system is understood in this way it is not possible to partition the system and not include the education offices and the leaders in these settings when attempting to understand the whole system. Complexity theory seeks to understand the multiple and nonlinear relationships within the *whole* education system, and how all within the system participate in these relationships of mutual influence (Uhl-Bien & Marion, 2009).
- Human capacities and potentials are understood as integral to understanding complex, human social systems, like education systems (Kurtz & Snowden, 2003). This means there is an opportunity to engage with a more expansive understanding of purpose, in particular moral purpose, giving full attention to how purpose and identity emerge within education systems (de Villiers-Botha & Cilliers, 2010).

This thesis, therefore, understands education systems, and the work of those within education systems, to be situated within the realm of the complex; a relational space of dynamic interactions, of unpredictability, and of emergence (Kurtz & Snowden, 2003; Synder, 2013). While this thesis engages with a theoretical frame informed by complexity theory, according to Beabout (2012) and Jäppinen (2014), this is not common in the field of education meaning that education has rarely benefited from this field of research (Davis & Sumara, 2006). While Snyder's (2013) working paper for the OECD explores the possibilities of applying complexity theory principles to education reform, and recommends experimental, collaborative, and flexible approaches to system wide change, Jäppinen (2014) suggests there is an underlying resistance to the translation of complexity based findings to education contexts. This is supported by Davis and Sumara's (2006, 2012) research that continues to identify challenges in reconciling what is happening in education research and complexity research. However, given the characteristics of the *Leading for Learning Project* and CESM in which the project was situated (as described

in Chapter 1), and in light of the reasons outlined above, complexity theory is deemed to be a useful and robust conceptual framework to explore the question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

To this end, I reviewed literature that reported on empirical studies that were either focused on understanding the underlying principles of complex adaptive systems in organisations, or drew on the principles of complex adaptive systems to explain phenomena within particular organisations. These studies were interested in identifying why particular organisations experienced some form of transformation and emerged in positive directions that were unexpected. From this review of the literature I developed a conceptual framework that exemplifies four conditions of emergence identified within these human social systems and four leadership practices that enabled these emergent conditions within these organisations.

The four conditions of emergence are:

1. Experiences of disruption and coherence.
2. Dynamic interactions.
3. Agency and interdependence.
4. Deep sameness and diversity.

The four leadership practices that enable emergence within organisations are:

1. Disrupting existing patterns of interaction and thinking.
2. Creating dynamic connections.
3. Sense making.
4. Ethic of care.

These conditions of emergence and leadership practices are used to structure the chapter within which the conceptual framework will be progressively developed. The conceptual framework will be used to guide the *Discussion* in Chapter 6, thereby providing a conceptual frame for exploring the research question focusing this study.

In this chapter, hand drawings are used to communicate the conceptual framework as a way of offering a visual representation of conceptual knowledge that both augments and clarifies what has been identified in the discussion. They have been created, not simply as an addition to the text, but integral to the process of knowing and understanding the text (Radnofsky, 1996). In particular, the hand drawings seek to offer a representation of the

complexity and an explanation of the interconnectedness of phenomena identified (Buckley & Waring, 2013). However, one of the challenges in representing complex phenomena is that the descriptions and representations offered reduce the complexity and obscure the dynamic interactions within the system (Cilliers, 2001). The use of hand drawings is an attempt to acknowledge this challenge by offering a medium that reflects the qualities of fluidity, freedom in the design, possibilities of change, and the status of being unfinished. The intention of hand drawings, therefore, is to capture the constant interplay between the representation of complex phenomena, in the form of hand drawings, and the actual complex world itself in which the drawer participates (Cilliers, 2001).

To set the context for exploring a conceptualisation of education systems as complex adaptive systems, and to reiterate why such an alternative perspective is being explored in this thesis, the key points of the argument for seeking an understanding of education systems, and system capacity building, outside the usual neoliberal frames of reference will be briefly outlined.

3.1 Education Systems as Organisations

Education systems are commonly described as organisations as they constitute the many social structures that reflect how those within the system work together around a particular purpose (de Villiers-Botha & Cilliers, 2010). The work of those in the organisation is guided by established principles or norms, enabling the organisation to achieve its goals (Hamel, 2007). The way in which education systems are understood as organisations, their purpose, structure, and function, is influenced by the current neoliberal mindset as outlined in Chapter 2. As Jansen, Cammock, and Conner (2011) suggest, from this perspective education systems as organisations are understood as rational entities and linear based structures focused on maintaining stability, efficiency, and performance outcomes; key tenets of success in such a neoliberal paradigm. Scholars, such as Hames (2007) and Hamel (2007), who offer a productive critique of current organisational theory, suggest that such a view can be traced to organisational theories that promote models and practices that apply reductionist and deterministic scientific models from the seventeenth century. The legacy of such organisational theories is predicated on a coherent and orderly view of the world, offering those who prescribe to

such a view a comprehensible understanding of perceived reality (Hames, 2007). It can be argued, as have Hamel (2007) and Uhl-Bien, Marion and McKelvey (2007), that when organisations are conceived as ordered and predictable, and are focused on determined outcomes, the underpinning organisational theory remains wedded to principles of the Industrial Era. As Hamel (2007) suggests, organisations have mistaken “the temporary for the timeless” (p. 43). This view of organisations is beginning to be questioned by scholars, such as Kurtz and Snowden (2003) and Morrison (2008), who are exploring complexity theory in organisational contexts and who suggest alternative ways of conceiving the world and thereby researching it.

The following offers three key points of argument outlining why this understanding of organisations, as applied to education systems, is limited and no longer useful in enabling education systems to focus on system capacity building: that is, enabling learning for all, where those in the organisation are focused on the potential and capacities of the person and, in turn, enabling the system to be adaptive and responsive to contemporary society (Hames, 2007).

First, while the logic of certainty and control may hold for simple and isolated systems, it cannot account for the behaviour of complex human social systems, like organisations, characterised as nonlinear, dynamic, unpredictable and capable of emergent self-organisation (Marion & Uhl-Bien, 2001). In the past fifty years of scientific exploration, new questions have emerged that have pushed the limits of existing scientific theories and, as a result, new theories have emerged that recognise the complex, dynamic, and self-organising characteristics of phenomena in the physical, natural, and social worlds (Davis & Sumara, 2012). While the fields of science are experiencing transformations that are rapidly changing the way the world is understood, the field of organisational theory has been slow to reflect these advances (Hamel, 2007; Wheatley, 2006). However complexity theory, as an emerging organisational theory, is providing an alternative perspective on how organisations might be understood.

Second, an understanding of organisations as ordered, predictable, and performance focused is critiqued as an ineffectual mindset for responding to complex issues confronting contemporary society (Wheatley, 2006). In recent times there have been momentous shifts in such things as: technology; cultural, religious, and social norms;

geopolitics; and, global financial markets. These shifts, and associated issues, present pressing environmental, social and cultural concerns, coupled with unique ethical considerations (Hamel, 2007). Such complex local and global concerns require organisations, and those that work in them, to be adaptive and flexible, and to offer creative and innovative responses that draw on the collective capacity of the organisation (Jansen et al., 2011).

Finally, as argued in Chapter 2, when organisations, like education systems, are focused on achieving narrowly defined performance measures the possibility of the organisation to fulfill the needs and aspirations of young people and their communities is diminished (Davis & Sumara, 2012). However, education systems understood as complex adaptive systems brings into focus the human potential that exists within organisations (Knowles, 2001; Regine & Lewin, 2000), and the value for relationships, diversity, and interdependence (Goldspink, 2007a; Mason2008). This is only possible when the potential and possibilities within people, and between people, and the conditions necessary for this potential to emerge, are recognised.

It is evident from the arguments presented above that the current conceptualisation of organisations, as applied to educations systems, is limited and no longer useful in enabling education systems to focus on system capacity building. However, this conceptualisation of organisations continues to be influential in current education reform literature, presenting the structure and function of education systems as orderly and rational, and outcomes focused (Hames, 2007; Wheatley, 2006). A recent example of this is in the *McKinsey Report* (Mourshed et al., 2010) that creates the image of a lean operating machine when describing the performance of education systems. This mechanistic metaphor is used to show how education systems alter their processes based on their input characteristics. “When input quality is low, the production system must have tight processes in order to deliver a quality output” (p. 52). This mechanistic view of education systems creates an illusion of control and of simple cause and effect relationships (Wheatley, 2006). Capra (2002) points out that this metaphor of the machine has been integral to a mechanistic paradigm that has dominated Western thought for the past four centuries and, to which Hames (2007) and Wheatley (2006) add, continues to shape our understanding of social constructs like organisations and how leadership is understood within such a construct.

When organisations are conceived as a “production system [that] must combine inputs and processes in order to produce outputs” (Mourshed et al., 2010, p. 52), leadership is then focused on directing the organisation towards such a stable and predictable state as a means to achieving particular outputs. As Kilduff, Crossland, and Tasi (2008) comment, in these environments leadership is expected to create structures and routines that manage such work outcomes, thereby intentionally directing and controlling the work of those within the organisation. Uhl-Bien and Marion (2009) suggest that the increased bureaucratisation of organisations has enabled such enactments of leadership to flourish. In effect, this understanding of leadership simplifies the day-to-day work of the organisation and suppresses the organisation’s complexity. Plowman et al. (2007) describe it in this way: “From this view, leaders try to control the future by actions to reduce complexity and uncertainty and directing followers towards highly prescribed future states” (p. 343). It would seem that this kind of leadership is a poor fit for organisations seeking to encourage innovation, adaptability, and learning as a way of being able to respond flexibly to changing environments.

The figure below (Figure 3.1) is a representation of the mechanistic view as a way of demonstrating its influence on how organisations are understood and experienced, and the subsequent translation into organisational and leadership practices

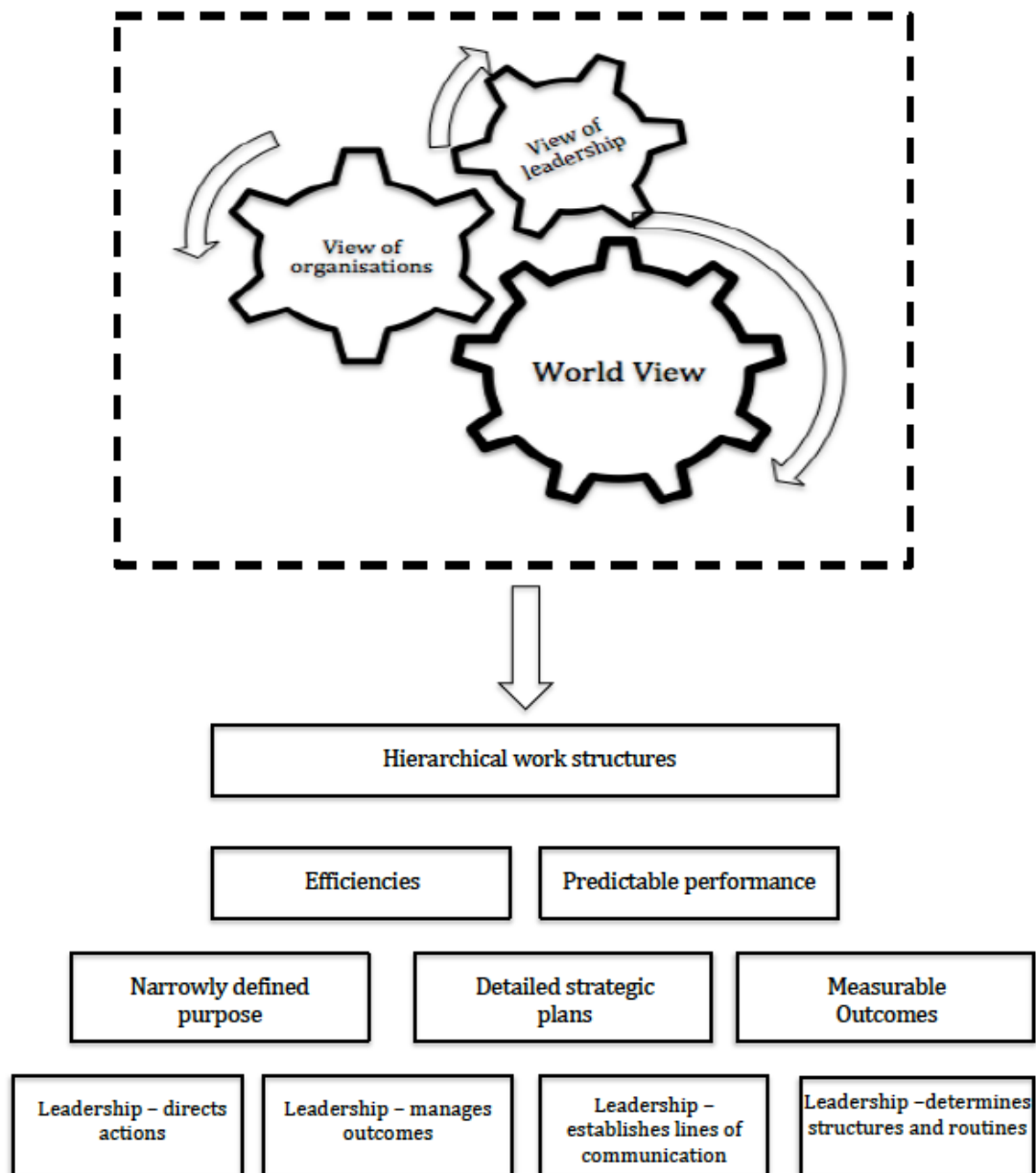


Figure 3.1. A mechanistic view of organisations and leadership practices.

This thesis, in inviting an exploration of education systems as complex adaptive systems and system capacity as a complex and emergent process, offers an understanding of education systems, not as mechanistic systems, but as living systems. This brings attention to the dynamic, connected, and emergent characteristics of human social systems like organisations (Capra, 2002). Such a characterisation of education systems as living systems offers new perspectives, new language, new images, and new cognitive frames for exploring the possibilities of education systems that transcend the regulatory

and performance mindset underpinned by a mechanistic view of organisations (Sandelowski, 1998).

The following sections provide a brief historical overview of the development of complexity science leading to a discussion on complexity theory and, in particular, complex adaptive systems. These introductory sections provide the background for understanding the development of complexity theory as an emerging organisational theory that understands organisations as human social systems with the capacity for emergent behaviour. This will be followed by the development of the original conceptual framework detailing the conditions necessary for emergence within organisations and the leadership practices that enable these conditions.

3.2 The Development of Complexity Theory

The past fifty years of scientific exploration has witnessed new scientific theories emerging that reflect a shift from a linear and rational view of the world to a perspective of the world as nonlinear and complex, characterised by uncertainty and unpredictability (see for example, Marion & Uhl-Bien, 2001; Regine & Lewin, 2000; Wheatley, 2006). This worldview, embodied in the sciences of complexity theory, provides insight into the complex and emergent nature of phenomena that has remained essentially unexplored by conventional modes of scientific inquiry (Davis & Sumara, 2012; Plowman, Solansky, et al., 2007). As Gough (2012) comments:

complexity invites us to understand that many of the processes and activities that shape the worlds we inhabit are open, recursive, organic, nonlinear and emergent. It also invites us to be skeptical of mechanistic and reductionist explanations, which assume that these process and activities are linear, deterministic and/or predictable and, therefore, that they can be controlled (at least in principle). (p. 42)

The science of complexity, as Stacey (2003) and Marion (2008) point out, does not represent one unified body of thought nor does it appear without antecedents. There has been, and continues to be, a diversity of interest and contested thought within the field of complexity (Mason, 2008). In establishing an understanding of complexity theory, it will be important to briefly outline the key signifiers within the scientific landscape from which the theories of complexity emerge.

While complexity was recognised within the period of scientific transformation of the 17th century and onwards, it was grounded in the model of classical sciences that honoured objectivity, causal explanation, and certainty. Complex problems were approached by their reduction into simplified concerns and solved independently (Alhadeff-Jones, 2008). It wasn't until the early to mid 20th century that defined, yet dispersed, bodies of research, generating theories attempting to explain the complexity of phenomena, were available for consideration (Stacey, 2003). Alhadeff-Jones (2008) and Stacy (2003) identify this first phase of theory development in the mathematical theories of communication and information (telephone exchanges and military encryption), neural networks (in the field of cognitive sciences), and the development of cybernetics. Cybernetics, for example, offered a macro level description of systems and how systems were capable of responding to the external environment through a process of feedback. This phase of theory development emphasised regulation, coordination, and control, and was situated in one of the well-defined fields of scientific inquiry or in the methodology used to understand complex systems (Cilliers, 2010; Stacey, 2003). In the literature, these theories are often referred to as a "restricted" view of complexity (Cilliers, 2010; Morin, 2007), as complex systems are conceived as somewhat mechanistic, and the methodologies tend not to escape from a positivist paradigm (Cilliers, 2010; Morin, 2007; Stacey, 2003). For example, complex systems are often understood through technical methodologies, such as computer modeling and simulations, with an interest in predicting behaviour and privileging the independent or external observer (Stacey, 2003). This is often evident in the language used to describe complex systems and those within them: Language such as agents, actors or nodes (people) and neural networks (interactions) is common (Grebe, 2010). This restricted view of complexity has influenced organisational theory, notably in the shift towards practices described as self-regulatory.

The tradition of cybernetics, as mentioned above, belongs within this restricted view of complexity theory and has promoted a view of the self-regulatory behaviour of organisations. As Stacy (2003) and Zhu (2007) comment, this self-regulatory behaviour is evident, for example, when managers shift focus from developing and using well defined plans with predictable outcomes to specifying a few "simple rules" to guide the work and produce the desired patterns of change or outcomes. Such actions, however, assume that the simple rules already exist, that humans will follow simple rules, and that simple rules can be defined within the dynamics of complex systems (Stacey, 2003; Zhu, 2007). A

further example of this self-regulatory behaviour is when management appropriates the notion of “edge of chaos” to deal with complexity. Here management keeps the organisation or activities loosely structured, but relies on targets and tight timeframes to keep things in check. Again the assumption is that management knows where the “edge” is and where development is needed within the organisation (Zhu, 2007). This restricted view of complexity theory, when used to understand social systems like organisations, tends to emphasise the role of an external control, such as a manager, in determining the self-organising patterns of the organisation (Zhu, 2007). The tendency is “to focus on an individual who is able to exert some kind of control or impart some kind of coherence to a self-organising organisation” (Stacey, 2003, p. 267). As Zhu (2007) comments, the influence of cybernetics, while identified within the field of complexity, upholds the predictability-control paradigm within traditional organisational models.

The research within these more restricted fields of complexity have provided a broad knowledge base about complex systems, and resulted in the development of general principles of complex systems (Haggis, 2008). However, it is argued that such conceptualisations of complex systems and the associated methodologies are inadequate for deeply understanding the nature of complex systems, such as organisations, where human persons are interacting in multiple and unpredictable ways. As Stacey (2003) comments, despite the consideration given to the *whole* system, the interacting entities within the system, and the capacity for self-organisation, there is an assumption that self-organisation and emergence can be controlled and predicted.

This development of the notion of “system”, with attention given to the constitutive interacting parts of the system, gave rise to *system theories* where disorder and order could be held in a necessary dialectic state enabling emergent self-organisation (Burnes, 2004). In contrast to the restricted perspectives outlined above, these system theories are often referred to as a general perspective (also referred to in the literature as a critical or radical perspectives) of complexity theory (Cilliers, 2010; Morin, 2007). Such theories are likely to be trans-disciplinary where ideas from across disciplines and fields of inquiry have the potential to transform each other, drawing on a plurality of descriptions to communicate understandings of complex systems (Cilliers, 2010). Within this general perspective, unpredictability is understood as emerging from within the system, highlighting the self-organising capacity of the system. Rather than self-organisation

conceived as being managed and orchestrated, a general perspective places emphasis on the local and differentiated interactions and evolving relationships as generating emergent new forms (Stacey, 2003). In contrast to the restricted perspective, a general perspective requires interpretative methodologies that give attention to the interactions, relationships, and dynamic patterns that emerge within these open systems (Haggis, 2008).

Systems theories, identified as chaos theory and dissipative structure theory, for example, reflect a desire to understand the system at the macro level (Burnes, 2004). Chaos theory is often portrayed as pure randomness, but as Burnes (2004) points out, for complexity theorists, chaos theory describes a complex, unpredictable, and orderly disorder, where chaos and order are twin features of dynamic and nonlinear complex systems. Dissipative structure theory, as Capra (2005) explains, describes how a system can maintain structure and order but also experience ongoing change processes. These theories give recognition to the emergence of self-organisation produced both by the order and disorder of the system's constitutive entities (Alhadeff-Jones, 2008; Cilliers, 2001). This development in system theories is demonstrated, for example, within the science of physics where a shift from a discipline concerned mainly with the constituent elements of physical matter to one focused on connections, relationships, and interactions within systems can be recognised (Hames, 2007; Wheatley, 2006). This has been mirrored by advances in biology and life sciences, bringing new understandings about collective behaviours, emergent patterns of interaction, and networks within living systems (Hames, 2007). Burnes (2004) identifies the common thread within the development of systems theories, like chaos theory and dissipative structures theory, as their understanding of natural systems as both nonlinear and self-organising. But, as Stacey (2003) notes, these theories also construct mathematical models of systems, as in the restricted view of complexity described above.

System theories have also influenced understandings about organisations and those that work in them. For example, Burnes (2004) comments, “complexity theory ... is beginning to have a profound impact on the view of how organisations should be structured and changed” (p. 310). One of the implications of these complexity theories for managers or leaders within organisations is the awareness that change cannot be pre-planned and then implemented (Zhu, 2007). Rather, it means engaging with the local and temporal experiences in the setting, and how the myriad of interactions within the setting give rise

to a diversity of view, and how these might guide the actions of leaders and give shape an emergent direction (Zhu, 2007). This perspective requires a reflexive and transformative approach to understanding the dynamic interactions with complex organisations (Cilliers, 2010). However, it needs to be noted that while such a perspective can be articulated, the question of what this means for the day-to-day work of managers or leaders remains contentious and the focus of continued exploration.

In summary, these system theories mark a shift from understanding systems as linear and stable, with little recognition of the diversity of such systems, to conceiving systems as nonlinear and connected, where instability and stability are experiences, and diversity is recognised as constituting the system. From this standpoint greater attention is given to the patterns of rich interconnectedness that are generative of emergent self-organisation (Uhl-Bien & Marion, 2009). This shift also signals a move away from a mechanistic understanding of systems to a living systems understanding (Hames, 2007). When human social systems, like organisations, are understood as living systems, attention is given to the complex networked ecology of the organisation and to the potential for understanding the human capacities within the organisation. As Capra (2005) observes, “The network is a pattern that is common to all life. Wherever we see life we see networks...these living networks are not material structures.... they are functional networks of relationships between various processes” (p. 35). These theories provide a fertile context for the exploration of the complex and emergent nature of organisations. It is important to note, however, that while this account marks the key signifiers within the landscape of the sciences of complexity, it does not reflect the constitutive disorder that has shaped the development of these theories, nor the diversity of meaning and definition that populates the field. This continues to be the case as will be demonstrated in the following section, where attention will be given the field of complex adaptive systems.

The following section offers an understanding of complex adaptive systems, as situated within a general perspective of complexity theory. While it can be problematic to offer a defining line between a restricted and general perspective of complexity theory (Cilliers, 2010), it is important to flag that, in contrast to the restricted perspective, the general perspective conceives of a mutual and dynamic relationship of influence between the whole and the part that enables emergent self-organisation. This general position also

holds diversity and unity as necessary for emergence (Morin, 2007). The section below, *Organisations as Complex Adaptive Systems*, will explore these ideas further.

3.3 Organisations as Complex Adaptive Systems

The field of complex adaptive systems is an area of growing importance within the complexity sciences. In particular, how organisations might be conceived as complex adaptive systems (Anderson, 1999; Stacey, 2003), with attention given to the interconnectedness within organisations, and how emergence within organisations enables new ideas and behaviours to form in unpredictable ways. It is important to note, as have Stacey (2003) and Antonacopoulou and Chiva (2005), that there are also views of organisations as complex adaptive systems that fall into the more restricted view of complexity outlined above. This view presents organisations in somewhat mechanistic and reductionist terms, and with the primary objective of predicting behaviour. For the purposes of this thesis, complex adaptive systems, and in particular human social systems like organisations, are explored within a general perspective of complex theory.

Within this general perspective complex adaptive systems are described as consisting of many interacting entities. In an organisation the entities are people and their ideas that interact in dynamic ways. These multiple interactions are non-linear, involving complex feedback loops that continually adjust and modify the behaviours and ideas of those in the system, enabling new behaviours and ideas to emerge (Capra, 2002; Uhl-Bien & Marion, 2009). Emergent self-organisation is central to understanding complex adaptive systems and arises from the dynamic relationships within the systems, as well as within the broader environment (Uhl-Bien & Marion, 2009). Emergent phenomena are unpredictable and may include new ways of working, new learning, adaptability, innovation or new relationships (Jansen et al., 2011; Marion, 2008; Uhl-Bien & Marion, 2009). However, they also create a dynamic structural patterning within the system (Haggis, 2008). These emergent system environments present both enabling and constraining conditions (Davis & Sumara, 2006). This can be understood as a balance or tension “between sources of coherence that allow a collective to maintain focus of purpose/identity and sources of disruption and randomness that compel the collective to constantly adjust and adapt” (Davis & Sumara, 2006, p. 147). While these conditions will be explored in the following sections, what is important is that complex adaptive systems, when experiencing this

balance or tension, are able to create the space necessary for emergent behaviours (Jansen et al., 2011).

The dynamics of complex adaptive systems and their resultant emergent self organisation are considered critical if social systems, like organisations, are to be sustained and successful in the highly complex local and global environments (Jansen et al., 2011; Uhl-Bien & Marion, 2008). The challenges experienced in these environments are embedded in social complexity and require new learning, creative responses, and new patterns of behaviour. Emergent self-organisation within complex adaptive systems is recognised within the literature (see for example, Capra, 2002; Davis & Sumara, 2012; Plowman, Solansky, et al., 2007; Uhl-Bien & Marion, 2008; Wheatley, 2006) as a key capacity necessary for organisations: the capacity to be open to new possibilities; the capacity to foster deep connections; and therefore the capacity to be sustainable in changing environments.

3.3.1 Understanding human qualities within complex adaptive systems.

While the description above gives attention to human organisations as complex adaptive systems, much of what has been described could be applied to other social or living systems. Three important contextual differences exist between human organisations and other social or living systems that need careful consideration if human qualities and potentials are to be fully expressed and, thereby, contribute to the emergent capacity of the organisation (Kurtz & Snowden, 2003).

First, humans are not limited to one identity, but have multiple and dynamic individual identities and collective identities that emerge in an ongoing way from the dynamic interactions with the world (Kurtz & Snowden, 2003; Snowden & Stanbridge, 2004). This is an understanding of an evolving sense of self that continually emerges through the interactions and relationships within the system (Morrison, 2008). In the context of dynamic systems, there is a reconceptualisation of the individual where the self is replaced by a “sense of self” and understood as continually emerging in multiple contexts (Haggis, 2008). A fuller account of identity will be given in Section 3.3.2 below, as identity is important in how an organisation, like the CESM (Catholic Education System Melbourne), the context of this study, understands its moral purpose.

Second, humans are not limited to acting in accordance with predetermined rules, but rather demonstrate capacities that enable them to engage with multiple intentions within the milieu of complex interactions with others (Kurtz & Snowden, 2003). Humans' interactions with others and the world are dynamic, responsive, and adaptive to changing environments (de Villiers-Botha & Cilliers, 2010). Humans make decisions based on patterns that engage both past and possible experiences (Snowden & Stanbridge, 2004), as well as engaging their capacity for reflection and ethical responsibility (Kunneman, 2010). Therefore, the extrapolation of rules to understand complex systems constituted of humans is not possible (Snowden & Stanbridge, 2004).

Third, humans are not limited to acting on only local patterns but have the capacity for multiple scales of influence and interaction, and therefore are not restricted to local influences as their conceptual and communication capacities enable them to have multiple levels of awareness within the system (Kurtz & Snowden, 2003). Humans are also able to create stable interactions and patterns where, over time, adaptive behaviours become stable patterns of day-to-day interactions or behaviours within the system (Snowden & Stanbridge, 2004). This kind of order will be explored in more detail below (Section 3.4.1).

Such human qualities, described above, make it difficult to engage with only the general characteristics of complex adaptive systems (Kunneman, 2010). These capacities and potentials of the human person, and the social and cultural frameworks in which they partake, belong to the characterisation of complex adaptive systems and imply such things as; choices, reflection, responsibility, and the practice of particular values (Kunneman, 2010). This expands the focus of understanding complex systems beyond "what they are" to an exploration of their identity and purpose. In the literature, this is addressed by scholars such as Cilliers (2010) and Kunneman (2010), through discussions about "ethical of complexity", which is recognised as an intersection of productive debate in furthering thinking on complex social systems like organisations. Consideration will now be given to identity and purpose and how this discussion is framed within the context of "ethical complexity" bringing into focus the possibilities of an expansive, and moral purpose of education that is argued for in this study.

3.3.2 Identity and purpose within complex adaptive systems.

Ethical complexity brings attention to the human capacities within organisations and how these, and the emergent relationships within complex systems, enable organisational identity and purpose to evolve (de Villiers-Botha & Cilliers, 2010). Within the scholarship of complex systems, identity is understood at multiple levels; personal identities, group identities, and the identity of the organisation. Identity is developed through the interactions and relationships within the system; as an ongoing process of differentiation and integration leading to new forms of ethically complex relations (Kunneman, 2010). Kunneman (2010), drawing on the scholarship of French philosopher Paul Ricoeur, understands identity as being mediated through narratives in the experience of:

coming together in the telling and listening to narratives, the development of personal identities can now be elucidated as a complex process...as a dynamic, ongoing answer to the interconnected questions ‘What am I?’ and ‘Who am I?’, both in the eyes of self and in the eyes of others. (Kunneman, 2010, p. 152)

In Kunneman’s analysis, this also includes engagement with culturally transmitted narrative traditions of the organisation and re-understanding them in the contemporary context. Kunneman, influenced by hermeneutic philosopher Gadamer, suggests that narrative mediation means the “ongoing application of the ethical and moral insights contained in the narrative traditions to new practical questions and challenges confronted by ever new generations” (Kunneman, 2010, p. 152). The process of identity formation is therefore understood as relational, mediated through dialogical and narrative encounters, where identities of individuals and groups emerge giving shape, and shaping an emerging organisational identity. In this way, the organisation claims its orientation and its purpose.

This understanding of how an organisation comes to understand its identity and purpose is important for this study as it enables an exploration of moral purpose, where the focus is on the person of the learner in the context of the social, cultural, and natural worlds in which the human person is integrally connected (Charlton, 2008; Starratt, 2007). As outlined in Chapter 2, this is in contrast to how purpose is understood within the dominant neoliberal paradigm where the prevailing values of the market economy - choice, competition, and accountability – give rise to a educative purpose narrowly focused on performance measures, thereby obscuring the possibility of a more expansive moral purpose. As Hamel (2007) and Hames (2007) suggest, a focus on narrowly defined

success markers and efficiencies diminishes the capacity of the organisation to engage with complex, ethical, and social issues that intersect with the lives of those in the organisation, and that shape the context in which the organisation exists. In exploring identity and purpose within complex systems, Cilliers (2010) and Kunneman (2010) suggest that leaders in organisations need to engage with the multiple relations, human capacities, and narratives, within and beyond the organisation, as an evolving process of defining and redefining the organisation's orientation. These processes invite the human person into a process of self-understanding, where individual identity is continuously constructed through the ongoing interpretation of life experiences and the engagement with multiple narratives. This is integrally connected to the emerging identity and purpose of the organisation (Kunneman, 2010; Preiser & Cilliers, 2010).

These understandings of organisational identity and purpose bring attention to the deeply connected and relational environments of human social systems where full consideration is given to the capacities and potentials of the human person, and how their personal, social, cultural, and/or religious narratives are necessary for emergent capacity of the organisation.

Having presented an understanding of organisations as complex adaptive systems and, in particular, how human qualities and potentials are integral to the emergent capacity of the organisation, the following sections will present the conditions identified as necessary for emergence within complex adaptive systems.

3.4 Conditions of Emergence

In the section, *Organisations as Complex Adaptive Systems*, emergence was identified as central to understanding complex adaptive systems. This section presents an original conceptual framework that I developed to exemplify the conditions necessary for emergent behaviour. These conditions of emergence were identified from a review of the literature, where empirical studies were either focused on understanding the underlying principles of complex adaptive systems in organisations, or drew on the principles of complex adaptive systems to explain phenomena within particular organisations. These studies were interested in identifying why particular organisations experienced some form of transformation and “took off and emerged in directions not envisioned by their

founders” (Lichtenstein & Plowman, 2009, p. 617). Often the changes were unexpected and seemed to be initiated by a few individuals, and not from the direction of the designated leaders. It was these kinds of observations that initiated these studies. Researchers like Lichtenstein and Plowman (2009), Plowman, Baker et al. (2007), Plowman, Solansky et al. (2007), and Uhl-Bien and Marion (2008), for example, recognised that the conventional organisational and leadership frameworks could not fully explain what was happening and, therefore, they drew on complexity science to explore ways of explaining what was occurring . The studies undertaken by these researchers, in identifying particular conditions present in these organisations, provide insight into the complexity of organisations and the conditions necessary for self-organisation.

Moreover, the research studies focusing this review engaged in qualitative approaches to understand what was happening in particular organisations. The focus was on understanding the experiences and actions of people in the organisations, with particular attention given to how leadership was enacted and how leadership enabled change. Plowman and Baker et al. (2007), for example, used a case study approach as it allowed, “a detailed look at nonlinear dynamics at work in organisations undergoing continuous change, dynamics that are much more difficult to capture in traditional linear analytical models” (p. 516). These researchers engaged in data collection strategies, such as interviews, observations, and document analysis, providing, as Plowman and Solansky et al. (2007) comment, “the opportunity to examine in fine-grain detail, the actions of leaders who were actively engaged in a changing organisation, but did not seem to be directing the change” (p. 346). These qualitative approaches enabled these researchers to understand the many and multiple connected interactions within the organisation, and beyond the organisation (Haggis, 2008; Preiser & Cilliers, 2010). Such research approaches guide the rationale for the approach to this study and will be further explored in Chapter 4.

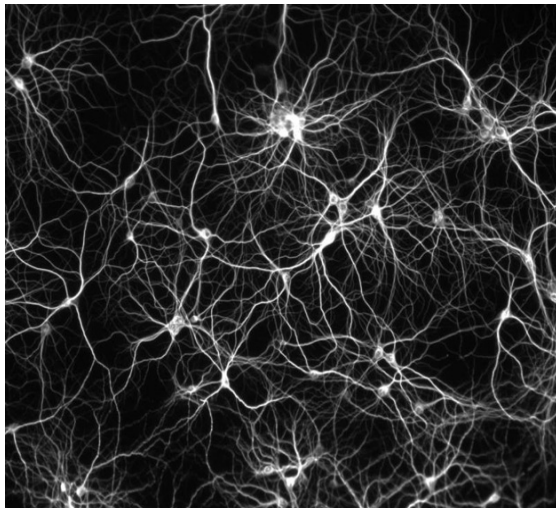
The four conditions of emergence that I synthesised from the literature are:

1. Experiences of disruption and coherence.
2. Dynamic interactions.
3. Agency and interdependence.
4. Deep sameness and diversity.

While each of the four conditions will be treated separately to highlight their particularity,

it is important to note that the conditions exist simultaneously within complex adaptive systems and are interdependent. These four conditions of emergence are integral to the original conceptual framework that I have developed for the purposes of this study.

As discussed at the beginning of this chapter, hand drawings are used throughout this thesis. In this section they are used to illustrate each of the conditions of emergence, with the final drawing presenting a more complex illustration to demonstrate the interconnectedness of these conditions. The medium of hand drawing has been chosen to bring attention to some of the characteristics of complex adaptive systems: that is, they are original in form and not mass-produced, thereby reflecting a quality of fluidity, the status of draft, and the possibility of emergence. The hand drawings more readily communicate the dynamic and web-like characteristics of the living systems metaphor being developed in this thesis. This is in contrast to the earlier diagram (Figure 3.1) used to communicate the ordered, stable, and linear characteristics of the mechanistic view influential in shaping current conceptualisations of organisations and leadership. The drawings in this section have taken their inspiration from a living system as captured in the following image of neurons (Figure 3.2).



The image (Figure 3.2) shows the morphology of neurons. In brief, these cells, through their complex network of interdependent metabolic interactions, support the function, the structure, and the sustainability of, not only the nervous system, but of the whole living system (human person). It is these dynamic networks that provide insight into living systems.

Figure 3.2. Image of neurons.

The drawings in this chapter attempt to capture the dynamic interconnectedness of living systems, as reflected in the above image and description of neurons, thereby encouraging an exploration of organisations, like education systems, as living systems. The drawings

bring attention to the nonlinear connections characteristic of living systems, their unpredictability and their emergent patterns, both enabled and constrained by the actions of those within the system, with the intention of system sustainability. With this purpose in the mind, the centrepiece of the drawing is presented in the following way (Figure 3.3), with additions to the drawing being made over the course of the chapter.

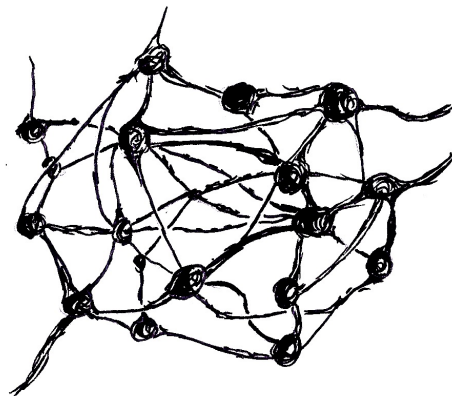


Figure 3.3. Centrepiece of the conceptual framework.

Each of the four conditions will be outlined below, including the drawings that will build towards the development of the conceptual framework towards the end of the chapter.

3.4.1 Experiences of disruption and coherence.

Complex systems are often described as simultaneously displaying the dynamics of order and disorder, stability and instability, and regularity and irregularity (Kurtz & Snowden, 2003; Stacey, 2003). It is the ability of the system, and those within the system, to be able to hold these positions of paradox that enables emergent self-organisation (Stacey, 2003). These experiences of paradox within complex adaptive systems lead to the identification of the first condition of emergence, *Experiences of Disruption and Coherence*. This section will describe how complex systems experience disruption and coherence, and how this can be understood as a simultaneous state of transformation and stability, necessary for emergence of new ideas and behaviours.

The experiences of disruption and coherence create the conditions necessary for the system to be open and engaged in the constant dynamic of transformation, as well as

being able to simultaneously create the experience of coherence. As Davis and Sumara comment (2006), this means that the system is able to hold a balance of sufficient stability to orient peoples' actions, as well as the necessary disruption to allow for flexible and varied responses. It is this state of paradox that creates the experience of coherence within the system thereby enabling the emergence of self-organisation.

While the studies identified in the literature review referred to the experiences of disruption and coherence in various ways - enabling constraints (Davis & Sumara, 2006), adaptive tension (Uhl-Bien & Marion, 2009), disequilibrium state (Lichtenstein & Plowman, 2009) - they all referred to the necessary movement away from stability to experiences of disruption, randomness, and an openness to possibility. These studies suggest that experiences of disruption can arise from the following: a diversity of view within the group; from emergent and new ways of working; resource constraints; new opportunities being pursued; conditions in the broader system environment; or changes in one part of the system (Lichtenstein & Plowman, 2009; Uhl-Bien & Marion, 2009). Such experiences can offer a provocation to those in the system and disrupt the usual ways of working and thinking in the system, thereby requiring adaptive and flexible responses to new and unexpected ideas. As Beabout (2012) points out, it is not the disruption alone that leads to change, but the collective response to the disruption; the problem solving, the dialogue, the questioning, and the action. Plowman et al. (2007), in their review of the *Mission Church* case, identified how existing ways of thinking about their purpose was disrupted and created instability:

Our findings suggest that conflict permeated Mission Church and the church's leaders were often in the centre of conflict... prior to the radical shift in the church's mission, the leaders took several actions that caused controversy. They welcomed homosexuals to the congregation, and experimented with alternative music and styles of worship. They unlocked the doors of the church during the week making it accessible to everyone.... The use of public forums encouraged new agents into the system, highlighting the conflicts among existing agents, and helping push the system further from equilibrium. (p. 348)

As Lichtenstein and Plowman (2009) remark, it is this "notable movement away from stability and toward dis-equilibrium, which sparks emergent change processes" (p. 620). The studies reviewed also suggested if such experiences are to be enabling and lead to emergent self-organisation there needs to be simultaneous experiences that create

coherence (Davis & Sumara, 2006; Kurtz & Snowden, 2003).

In the context of complex adaptive systems, coherence is not an experience of order that is externally imposed or controlled. Kurtz and Snowden (2003) suggest coherence can best be explained by the word un-order: “un-order is not a lack of order, but a different kind of order, one often not considered but just as legitimate in its own way” (p. 465). In doing so, Kurtz and Snowden (2003) challenge the assumption that any order not directed or designed is invalid or unimportant and suggest an emergent order: “In dynamic and constantly changing environments, it is possible to pattern un-order but not to assume order” (p. 466). While un-order emerges as patterns of interaction and ways of working within the system, it is equally constrained by the very conditions that enabled these patterns – diversity, dynamic interactions, and the interdependencies in the system (these conditions will be addressed in the following sections). In this way, the emergence of un-order is both an experience of coherence as well as an experience of disruption: “In the space of un-order the seeds of such patterns can be perceived, and new ways of thinking can emerge. In fact learning to recognise and appreciate the domain of un-order is liberating” (Kurtz & Snowden, 2003, p. 466). Such a term as un-order captures the paradox of emergent self-organisation: the necessity for coherence within the experience of disruption.

This review of these studies suggests complex adaptive systems are in a simultaneous state of transformation and constraint. It is these continuous processes that enable the system to experience coherence. As Haggis (2008) comments, “Coherence is *the existence of the system itself*, and the processes that continue, through time, to maintain the system *as a system*” (p.168).

The following drawing (Figure 3.4) provides a summary description of the first condition of emergence, *disruption and coherence*, as well as some emergent characteristics of complex adaptive systems when this condition is enabled to flourish in an organisation.

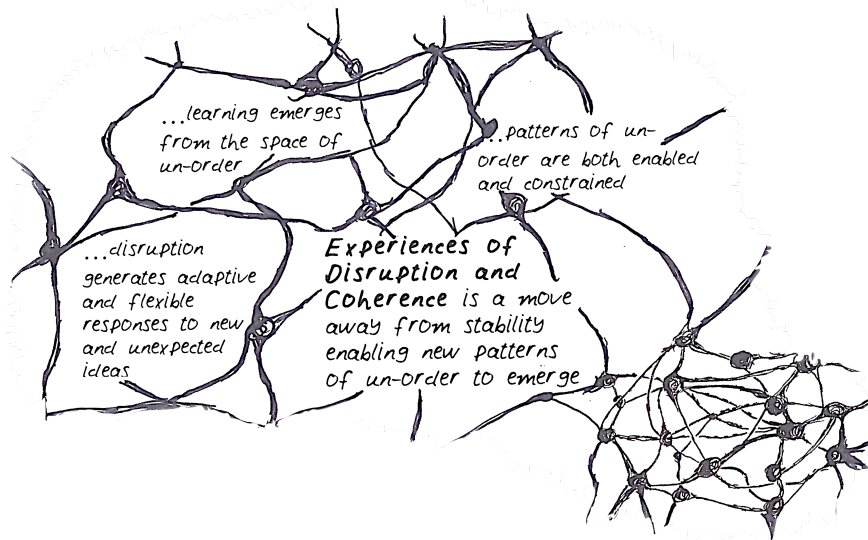


Figure 3.4. Experiences of disruption and coherence.

The next three conditions of emergence identified in the literature, are also characterised by the paradox reflected in the idea of ‘enabling constraints’ and, as will be described, each condition is also an experience of disruption and coherence.

3.4.2 Dynamic interactions.

As complex adaptive systems, organisations are characterised by a multitude of non-linear dynamic interactions that give rise to emergent self-organisation (Cilliers, 2010; Uhl-Bien & Marion, 2009). Through such networks of interactions people engage in dialogue, exchange information, take action, and continuously adapt to feedback from each other (Plowman, Solansky, et al., 2007) and, in this way, enable new ideas, information, and new ways of doing things to move quickly through the system (Lichtenstein & Plowman, 2009). When these conversations are inquiry focused, self-reflective, and engage a range of perspectives, they enable possibilities to be explored in relation to the purpose of the work. Gunnlaugson (2011), drawing on the work of Scharmer (2007), suggests that through such conversations people are participating in the process of emergence, that is “learning together from an emerging future by collectively sensing into and intuiting not yet embodied or known possibilities” (p.3). Those in the system, therefore, through a network of dynamic interactions, are continually re-engaging with the possibility of a system’s emerging purpose.

Dynamic interactions within complex systems can be understood as creating a space, or opening up a space, to explore possibilities (Gunnlaugson, 2011; Osberg, 2009). Osberg (2009) suggests that it is difficult to conceive of this concept if an organisation's function is determined by rules of interaction and a focus towards known outcomes where all possibilities are calculated. However, when organisations are characterised by dynamic interactions, and where there is a plurality of views, the concept of "enlarging the space of the possible" can be conceived: "[This] can be understood as an exploration or movement into that which cannot currently be conceived as a possibility" (Osberg, 2009, p. vi). In this way, the system is able to self-organise as the space has been created for this to happen. Lichtenstein and Plowman's (2009) study of emergence in organisations identified how ServiceCo (technology company) undertook a commitment to engage in rich and lengthy interactions with all members of the company to identify where there was hidden potential within the organisation and seek possibilities for change:

they accomplished this through rich and unprecedented interactions with every employee over nearly six weeks.... engaging in in-depth conversations about the possible future of the company and how each member could best contribute. The unique connections revealed competencies that had been hidden amongst staff, leading to more novelty that helped amplify the changes at ServiceCo.

(p. 623)

Through creating the space for extended interactions the company discovered more of its potential and was able to re-design how it went about its work.

Dynamic interactions, within complex adaptive systems, create feedback loops which occur across networks of connected relationships and have the effect of amplifying qualities or dynamics across the system that are important for the system's ongoing growth and enactment of purpose (Davis & Sumara, 2006; Morrison, 2008). In this way new ideas, behaviours or seeds of change in one part of the organisation are amplified across the organisation in unexpected ways. Lichtenstein and Plowman (2009), in their review of the *Mission Church* case, describe the "seeds of emergence" in this way:

In the midst of rising uncertainty and increased controversy at the Church, a loosely affiliated group of young adults launched a unique idea: serving breakfast to the homeless people who lived in the downtown neighborhood. The pastors, who had little involvement in it, O.K.'d this "unorthodox" idea. Within a few weeks, "Café Corazon" was serving over 200 breakfasts a week and the initiative

became the seed for greater and greater emergence at the Church over the next 5+ years. The seed itself grew through a series of experiments: six months into the effort a volunteer physician spontaneously started free medical check-ups, and then recruited other doctors and services, eventually opening a medical clinic that served up to a thousand homeless people each year. Further experiments with funding and alternative programs continued to occur, resulting in unanticipated income and programs to be funded. (p. 623)

As is characteristic of complex social systems, there are many factors interacting in the *Mission Church* case (uncertainty, controversy, experimentation). Of interest to this discussion is how seemingly undefined connections between people enabled the emergence of new ideas, and how these ideas were amplified across the organisation, thereby expanding the scope of possibility beyond what was expected (Lichtenstein & Plowman, 2009; Uhl-Bien & Marion, 2009). Within organisations, dynamic interactions are able to amplify emergent behaviours or seeds of emergence, which are important for an organisation's ongoing transformation towards enacting a dynamic sense of purpose.

The presence of dynamic interactions within organisations does not mean, as Cilliers (2010) points out, that the interactions produce random or chaotic behaviours. Rather, the nonlinear, iterative interactions between diverse people enable ideas and ways of working and thinking to emerge and to develop a structure or pattern. This is like the experience of un-order described above, where structure and pattern is not order imposed, but rather un-order emerges through the dynamic interactions (Kurtz & Snowden, 2003). The un-order is embodied in the patterns of interactions between people, and between groups of people, and is deeply intertwined in the social complexity of the organisation, but it is an un-order equally constrained by these dynamic interactions (Stacey, 2003). In this way, the organisation can be understood as simultaneously structured and patterned, as well as in an emergent state of continually transforming these structures and patterns (Cilliers, 2010). This paradoxical experience, as Haggis (2008) suggests, is the experience of coherence necessary for the existence of the system *as* a system, and Cilliers (2010) adds to this by understanding the system as simultaneously something stable and something ready for change. This is one of the paradoxes associated with understanding the nature of complex adaptive systems; emergent self-organisation is only possible if the system experiences enabling constraints (Cilliers, 2001; Stacey, 2003).

The condition of dynamic interactions brings attention to how the boundary of the organisation is understood and, as Grebe (2010) comments, in complex systems this is difficult to specify. An organisation's boundary is often defined as a way of describing the limits of the organisation or identifying it from another (de Villiers-Botha & Cilliers, 2010). However, when an organisation is understood as a complex system, it is understood as an open and dynamic system, meaning the organisation is embedded within, and partly constituting, other organisations (Cilliers, 2001; Haggis, 2008). Therefore, the boundary can be difficult to "locate" as a stable entity: rather the boundary can exist in different spatial locations or be experienced through the dynamic interactions within and beyond the organisation:

There is thus no safe 'inside' the system, the boundary is folded in, or perhaps, the system consists of boundaries only. Everything is always interacting and interfacing with others and within the environment; the notions of 'inside' and 'outside' are never simple or uncontested. (Cilliers, 2001, p. 142)

Boundaries, and the dynamic interactions that constitute them, can also maintain or privilege certain behavioural norms or uphold patterns of social power (Woermann, 2010). Therefore, such boundary encounters, how they are experienced in organisations, and how they influence emergent self-organisation, are important in developing an understanding of the characterisation of complex systems, like organisations.

In summary, dynamic interactions are a necessary condition for emergent self-organisation within complex adaptive systems, since these create spaces that are open to the emergence of possibilities. Through feedback loops across the system, seeds of emergence are amplified enabling new ideas and ways of working to move through the organisation. These dynamic interactions both enable and constrain the system, creating an experience that is simultaneously structured and patterned, offering coherence as well as an emergent state of continual change.

The following drawing (Figure 3.5) provides a summary description of the condition of emergence, *dynamic interactions*, as well as some emergent characteristics of complex adaptive systems when this condition is enabled to flourish in an organisation.

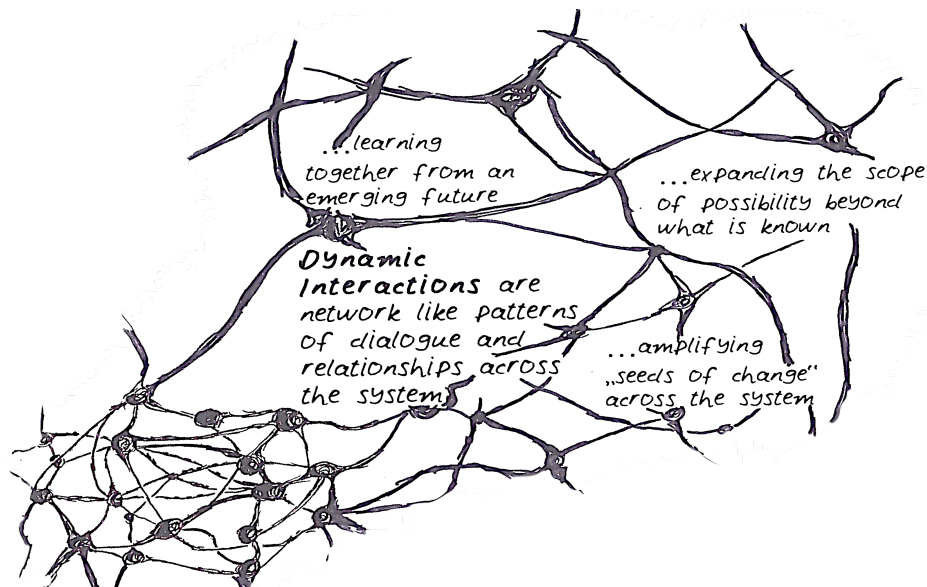


Figure 3.5. Dynamic interactions.

3.4.3 Agency and interdependence.

In complex systems like organisations the agency and interdependence of people within the system is important for emergent self-organisation (Jansen et al., 2011; Uhl-Bien & Marion, 2009). Agency is understood as the freedom to act in ways that are self-determined, not only as an expression of their own identity as human persons, but also as a way of contributing to the purpose of the organisation. Agency creates opportunities for continual adaptation and learning, and for individuals to initiate and create ways of working within the organisation (Jansen et al., 2011). These behaviours of learning and adaptation emerge not from a determined overall plan of action, but rather from individual initiative and action (Mason, 2006). An understanding of agency within complex adaptive systems extends beyond the individual to include the agency of groups within the system, as well as the agency of the system itself. Chiles, Meyer, and Hench (2004), in their empirical study of emergence within the *Branson Musical Theatres*, identified the interplay between individual agency and agency of the broader theatre organisation. The deep-seated values and beliefs of the organisation, and the collective desire to enact these, provided coherence, shaping the development of the individual theatre populations and guiding their choices about theatre productions; “locals counseled newcomers on the importance of fully reflecting local cultural values in the performances and maintaining the cultural consistency that had become central to Branson’s national image” (p.512).

Lichtenstein and Plowman's (2009) analysis of this study suggest, "all theatres were constrained yet enabled by being more fully integrated into their local fabric of culture and beliefs that have led to Branson's success" (p.625). Individual and system agency brings attention to the connected nature of the system, and the possibility of exploring simultaneously individual agency and collective agency. This potential for system agency, where the system is conceived as being able to learn and respond, is enabled through the interdependencies of people within the organisation (Davis & Sumara, 2006; Jansen et al., 2011).

Interdependence within complex adaptive systems can be understood as the way people in the organisation connect with each other, influence each other, and interact to accomplish their work. Uhl-Bien and Marion (2009) suggest that interdependence is often facilitated within the organisation through a shared need. This does not mean that individuals or groups have exactly the same aspirations, but rather there is a shared need to connect with each other and work together to achieve their individual or group needs as discerned from their own context (Uhl-Bien & Marion, 2009). In this way, agency and interdependence, as a condition of emergence, are able to embody diverse individual and group aspirations as expressed in multiple contexts across the systems, as well as create a deep and relational connection through a shared purpose. (Cilliers, 2010; Kunneman, 2010). As Wheatley (2006) comments, this provides opportunities for many people to be engaged in interpreting the purpose of the organisation and creating direction, rather than a few people.

In complex adaptive systems, it is not only people that are interacting but also ideas and perspectives. As Davis and Sumara (2006) suggest, "the neighbors that must interact with one another are ideas, hunches, queries, and other manners of representation" (p.142). These neighbouring interactions of embodied ideas and perspectives, are not just between individuals, but also between groups and across groups within the organisation, creating interdependencies in the organisation that are rich and dynamic (Davis & Sumara, 2006; Jansen et al., 2011). Such interdependencies, created around diversity of need, are not without struggle as people grapple with new and diverse ideas (Cilliers, 2001; Jansen et al., 2011). While individuals and collectives experience the freedom to act in self-determined ways - they have agency - they are also interconnected and influenced by others as they seek to understand their work within the context of the organisation's

shared purpose. Hence, the condition of agency and interdependence both enables and constrains the organisation: that is, the condition creates a balance or tension between the possible randomness of the individual, and the coherence that can be achieved by the interconnection of individuals or groups, through a shared organisational purpose (Davis & Sumara, 2006; Jansen et al., 2011).

In summary, agency and interdependency is a necessary condition for emergent self-organisation within complex adaptive systems by enabling expressions of diversity, as well as a deep relational connection to others and to the emerging purpose of the organisation. The experience of this condition is not without struggle as people grapple with new ideas, new relations, and ways of understanding their collective work. In this way, agency and interdependency within the system both enables and constrains emergent self-organisation.

The following drawing (Figure 3.6) visualises the condition of emergence, *agency and interdependency*, as well as some emergent characteristics of complex adaptive systems when this condition is enabled to flourish in an organisation.

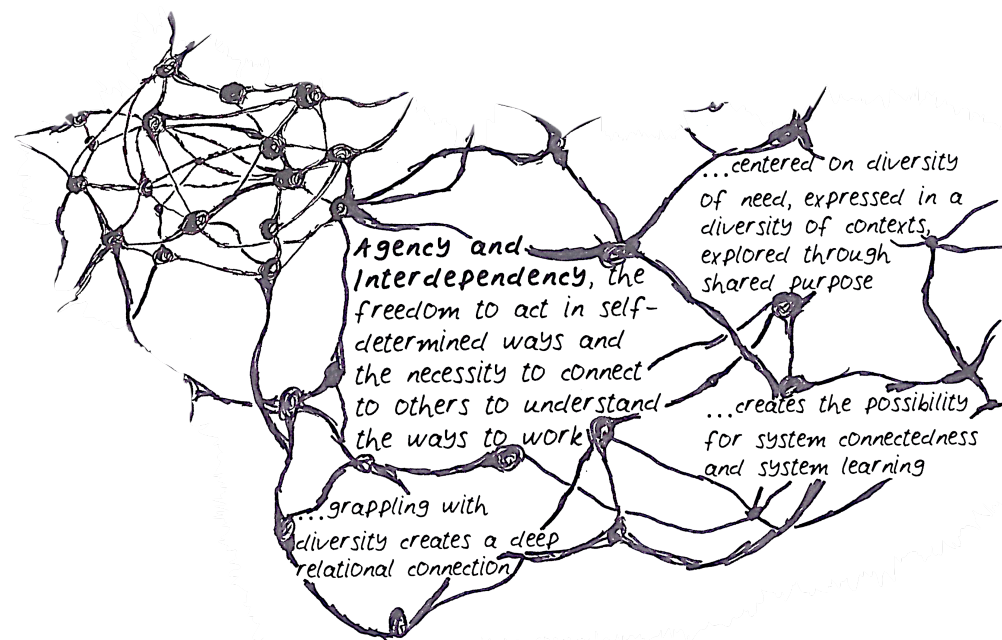


Figure 3.6. Agency and interdependency.

3.4.4 Deep sameness and diversity.

The presence of deep sameness and diversity within complex adaptive systems is recognised by scholars (see for example, Cilliers, 2010; Mason, 2008; Uhl-Bien & Marion, 2009) as important for enabling emergent self-organisation. Within organisations, deep sameness is present in common experiences, views, and shared knowledge within the system and emerges from patterns of interaction and norms that stabilise within the organisation (Davis & Sumara, 2006). The experience of deep sameness enables people to feel safe, explore new ideas, and share diverse views (Gunnlaugson, 2011). Deep sameness also emerges through the process of identity formation at a personal, collective, and system level; a process that is relational and dynamic. Deep sameness, therefore, is not a static or fixed experience, but a relational experience where meaningful relationships develop through the engagement with difference, and where meaning is only possible because of some experience of sameness (de Villiers-Botha & Cilliers, 2010).

Within organisations, diversity is present in the different skill sets, experiences, ideas, and perspectives of people (Mason, 2008; Uhl-Bien & Marion, 2009). Diversity is not a static difference between people or groups within the system but, rather, diversity is expressed through dynamic and rich interactions (Stacey, 2003), which can be unsettling as perceptions of self, others, and worldviews shift and relationships are transformed (Gunnlaugson, 2011). In such environments there needs to be a freedom to explore and experiment, allowing new differences and perspectives to emerge and provide meaning to the system. These emerging meanings and patterns of relationships are understood as an expression of diversity (Cilliers, 2010). While diversity can be the source of provocation necessary for the emergence of creativity and innovation, this is only possible if, simultaneously, there is an experience of deep sameness offering the system coherence. “A complex system's capacity to maintain coherence is tied to the deep commonalities of its [people]” (Davis & Sumara, 2006, p. 139).

Identity emerges from the interplay of diversity and deep sameness; as identity continually evolves in the context of relationships of difference (de Villiers-Botha & Cilliers, 2010). The identity of the system is understood as the dynamic interplay of interactions and relationships within the system and, as suggested earlier (Section 3.3.2), is mediated through narrative: personal narratives, collective narratives, and the cultural and/or traditional narratives that intersect within the system (Kunneman, 2010). This

evolving sense of identity, shaped by multiple and rich narrative traditions, embodies the organisation's purpose and how this purpose is enacted (de Villiers-Botha & Cilliers, 2010). This relational and emerging process of identity formation is fostered through the condition of diversity and deep sameness, giving shape to the organisation's purpose.

If diversity is to enable emergence, then the following three points need to be considered; a) the marginalisation of diversity, b) the unlimited interplay of diversity, and c) the inclusion of all diversity. First, if diversity is to enable dynamic meaning, the diversity that constitutes the organisation needs to be able to influence the meaning and structure of the organisation. If diversity is disregarded or marginalised, Uhl-Bien and Marion (2009) and Wicomb (2010) suggest, the system cannot be fully understood and the relationships within the system are diminished. Cilliers' (2010) position is that "relationships of difference *constitute* complex systems" (p. 5). Therefore, to ignore such difference in the system is to restrict the system in its ability to engage with new and emergent meanings necessary for ongoing transformation (Mason, 2008; Uhl-Bien & Marion, 2009). It can be argued, as have Cilliers (2010) and Wicomb (2010), that such choices about whether the system is open or closed to diversity have ethical implications for how we understand human systems.

Second, the limitless interplay of difference is not conducive to emergent self-organisation. The patterns of interaction and relationships that emerge within the system *because* of diversity also constrain the system (Cilliers, 2010). Therefore, diversity both enables and constrains the emergence of new ideas and ways of working. As Cilliers (2010) points out, "Meaning is only possible when there are many differences interacting by constraining each other" (p. 10).

Third, the necessity for diversity within complex adaptive systems does not mean that all diversity is fostered or included. Within human social systems, particular values are enacted or privileged, and choice is exercised bringing to the fore ethical and normative discussions in respect to diversity (Kunneman, 2010), and how such expressions of diversity are understood within the context of an organisation's emerging purpose (Cilliers, 2010; Kunneman, 2010; M. Mason, 2008; Wicomb, 2010).

In summary, deep sameness and diversity is a necessary condition for emergent self-

organisation within complex adaptive systems. Rather than dualisms, one is present only because of the other. Deep sameness is a relational experience, where meaningful relationships are possible because of some experience of sameness but, simultaneously, these relationships are only possible because of the engagement with difference. In this way, the condition of deep sameness and diversity is understood as an enabling constraint within complex adaptive systems, offering the system coherence.

The following drawing (Figure 3.7) visualises the condition of emergence, diversity and deep sameness, as well as some emergent characteristics of complex adaptive systems when this condition is enabled to flourish in an organisation.

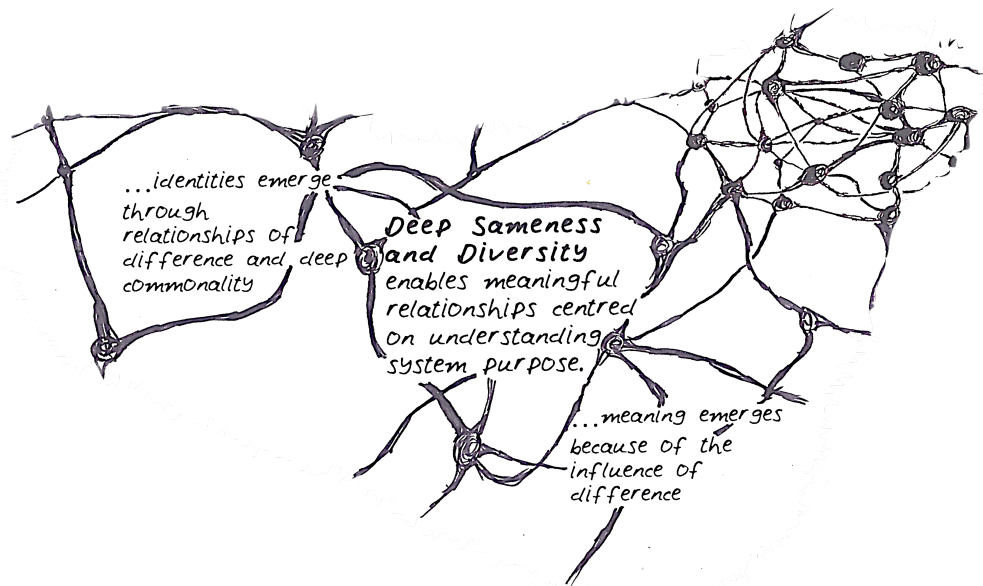


Figure 3.7. Deep sameness and Diversity.

3.5 Conceptual Framework: Conditions of Emergence

The following figure (Figure 3.8) presents an overview of the four conditions of emergence and brings together the 4 drawings presented in each of the sections above. The drawing is intended to evoke and capture the idea of organisations as living systems; a dynamic network of connections that are emergent and open to possibility. The conditions necessary for emergence within organisations are represented as *emerging within* the living system, rather than imposed from outside the system. The emergent

characteristics of the system, recorded in the conceptual framework, are presented as provocations, taking thinking beyond the usual mechanistic view of organisations presented earlier in the chapter (Sections 3.1). These characteristics embedded in the drawing are intended to provoke curiosity, a sense of possibility, and perhaps uncertainty, as they are not the usual characteristics attributed to organisations. The drawing will continue to be developed, with its final iteration at the conclusion of the chapter.

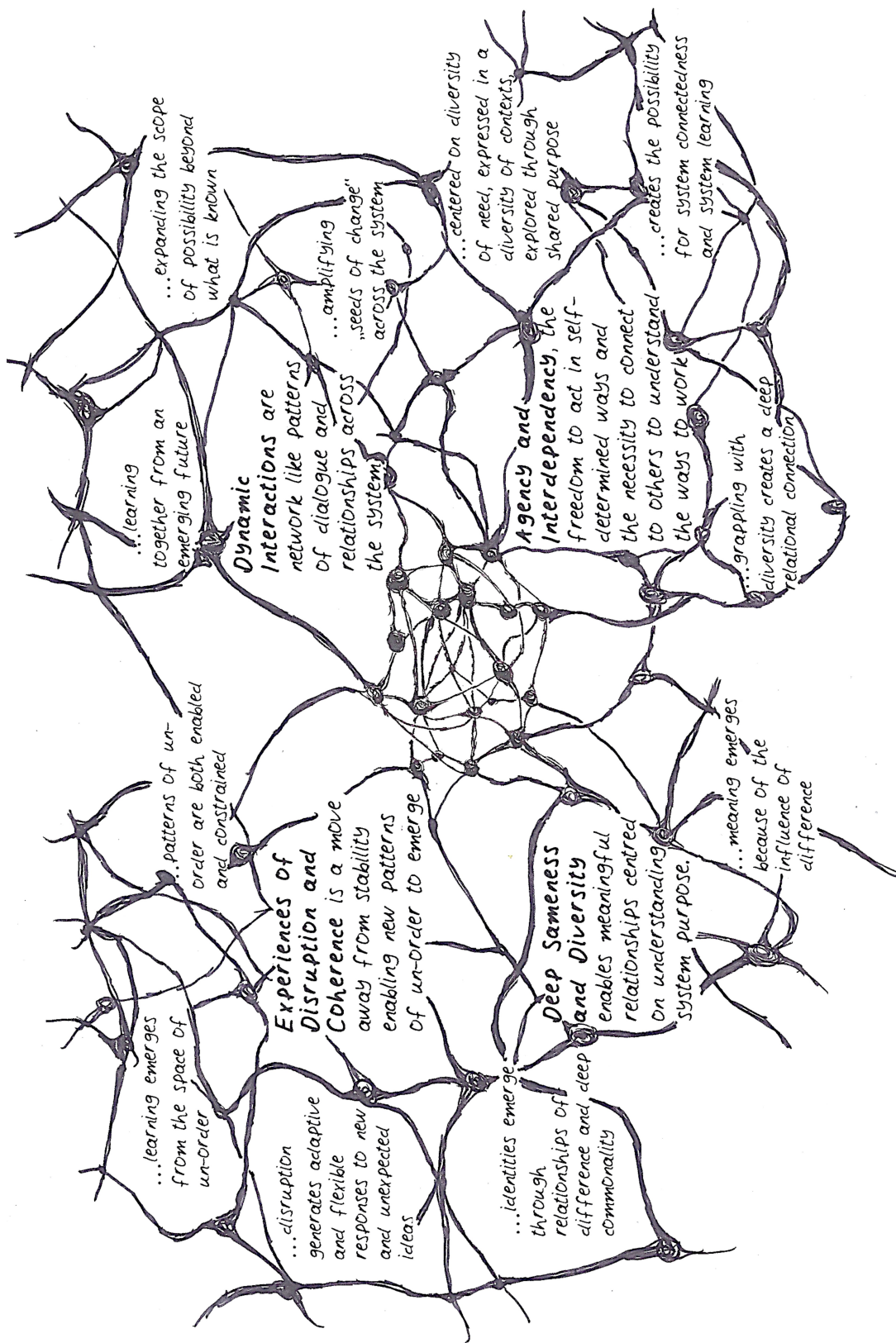


Figure 3.8. Conceptual framework – Conditions of emergence.

It is the dynamic interplay of these four conditions of emergence - disruption and coherence, dynamic interactions, agency and interdependence, and diversity and deep sameness - that are proposed as enabling emergent self-organisation within complex adaptive systems. Arguably, when these conditions are present, what emerges is the capacity of the system to be open to possibilities and to learning - to new ideas and ways of working, and to be adaptive and flexible in response to the broader context and the emerging purpose of the organisation. This is only possible because these conditions are both enabling and constraining. It is this dynamic tension of enabling constraints that provides the experience of system coherence and the possibility of transformation.

This understanding of organisations as complex adaptive systems reflects a shift in worldview. A shift from understanding organisations as complicated, rational, and stable entities, to that of the organisation as dynamic, relational, and uncertain. This shift can be captured in a move from a mechanistic view to a living systems view. Capra (2002) suggests, “living systems continually create, or re-create, themselves by transforming or replacing their components. They undergo continual... changes while preserving their web-like patterns of organisation. Understanding life means understanding its inherent change processes” (p.100). Such a living systems view of organisations offers alternative perspectives that open up possibilities for other ways of thinking, working, and being within education systems that transcends the existing structures and mindsets of education reform (Harris, 2010). Such a perspective offers a dynamic, integrated, and emerging understanding of organisations, where the deep ecology of organisations, constituted of human persons, can be explored (Capra, 2002; Wheatley, 2006).

The final sections of this chapter address how leadership within complex adaptive systems enables these conditions of emergent self-organisation. This section will begin by situating the discussion within the context of the current leadership literature, in particular, the relational and socially constructed understandings of leadership.

3.6 Emerging Perspectives on Leadership

Earlier in this chapter (Section 3.1) it was argued that the current conceptualisation of organisations as stable, rational, and linear entities, which largely focus on narrowly defined performance measures, was limited and no longer useful in enabling

organisations, like education systems, to focus on system capacity building (Hames, 2007). It was also suggested that the models of leadership, embedded within this understanding of organisations, are no longer suitable for complex and dynamic organisational contexts. While such models of leadership, or the residual influence of such models, are present in various ways within many organisations, other robust and diverse conceptualisations of leadership are becoming increasingly influential within scholarly discussion and research (see for example: Bryman, Collinson, Grint, Jackson, & Uhl-Bien, 2011; Goldstein, Hazy, & Lichtenstein, 2010). This section will begin by examining current leadership literature that departs from leader-centric views of leadership, where the leader has authority and control over the direction of the organisation (Plowman, Solansky, et al., 2007) by exploring relational and socially constructed conceptions of leadership. It is these views that include an understanding of leadership as emerging within complex adaptive systems.

This section will include a detailed review of empirical studies interested in understanding the influence of leadership in organisations where researchers had identified emergence within organisations (see for example: Chiles et al., 2004; Lichtenstein & Plowman, 2009; Plowman, Solansky, et al., 2007; Uhl-Bien & Marion, 2009). In reviewing the literature, I identified four leadership practices as necessary in enabling the conditions of emergent self-organisation. These practices were identified as:

1. Disrupting existing patterns of interaction and thinking.
2. Creating dynamic connections.
3. Sense making.
4. Ethic of care.

These leadership practices contribute to the development of the original conceptual framework I have developed for the purposes of this study. Each of these four key leadership practices will be described, with the full conceptual framework presented at the end of the chapter.

The basic ontology of leadership is often expressed as a framing of the essentials of leadership: leaders, followers, and common goals (Drath et al., 2008; Uhl-Bien, 2006) where leadership is expressed as a position of influence (Osborn & Hunt, 2007). Bolden et al. (2011) confirm this view and suggests it is limited in today's contexts:

the representation of leadership as something done by leaders to followers in pursuit of a common goal ... does not fit well with the emergent, informal and collective forms of leadership within complex and collaborative environments. (p.173)

These emergent forms of leadership, referred to by Bolden et al., assume a relational ontology, where persons and their social context are interdependent constructions existing and known only in relation to each other (Hosking, 2006; Uhl-Bien, 2006). Leadership, therefore, *is* the complex and continuous relationships of people within their social context, thus the relational becomes the focus within leadership studies (Baker, 2001; Woods, 2005). As Woods (2005) comments, “Whatever we experience as leadership *is itself transforming* as a part of the system” (p. 1109). From this perspective, leadership is understood as a *process* of collaborative nonlinear interactions where people are continually making sense of their complex environments (Jäppinen, 2014). A relational ontology brings attention to the collective dynamic of the organisation and emphasises leadership as relational within this dynamic.

Relational and socially constructed views of leadership can be referenced in many of the overlapping models of leadership within the literature, e.g. distributed, shared, collective, and transformational leadership (see for example: Harris, 2008; Leithwood & Sun, 2012; Uhl-Bien, 2006). Each of these models offers important understandings about the dynamics of leadership. However, for the purposes of this study, attention is given to literature exploring emerging areas of leadership theory, in particular, understandings of leadership informed by the field of complex adaptive systems (Drath et al., 2008; Uhl-Bien, 2006).

An understanding of leadership as relational and socially constructed (Uhl-Bien, 2006; Woods, 2005) is a view of leadership as a human social construction that emanates from the rich connections and interdependencies between people within the social context or organisation (Jäppinen, 2014; Uhl-Bien, 2006). A relational perspective does not seek to identify particular attributes of individual leaders but, as Hosking (2006) and Uhl-Bien (2006) suggest, seeks to understand the dialogical or communication processes through which leadership emerges throughout the organisation (Hosking, 2006; Uhl-Bien, 2006). Attention is given to what happens between people where deep interactions and meaning emerges in multiple contexts across the system (Bradbury & Lichtenstein, 2000). A relational perspective of leadership is grounded within the interdependencies of the social

context (Ospina & Sorenson, 2006) and therefore challenges the essentialist notion of context. The social context of leadership emerges through the leadership relationships. Grint (2005) argues, “leadership involves the social construction of the context that both legitimates a particular form of action and constitutes the world in the process” (p. 1471). Therefore, from a relational perspective, leadership is emergent and inseparable from context; an iterative social process shaped by the interactions with others and understood as an attribute of the organisation (Jäppinen, 2014; Uhl-Bien, 2006).

Leadership research in this area signifies the conceptual constructs to be explored for a deep understanding *of* leadership and the *context of* leadership (Osborn & Hunt, 2007). One emerging field of inquiry where such conceptual constructs can be explored is the field of complex adaptive systems. The following sections will focus attention on leadership within complex adaptive systems and, in doing so, will offer an original conceptualisation of leadership and how leadership enables emergent behaviour within organisations.

3.7 Leadership within Complex Adaptive Systems

The field of complex adaptive systems offers a new perspective for leadership research by considering the relational dynamic of leadership and the contexts in which leadership is enacted (Osborn & Hunt, 2007; Uhl-Bien & Marion, 2009). This is a nascent field of research, to which this thesis contributes. Empirical studies within the field of complexity are bringing into clear focus the question of how leadership enables the conditions for emergent self-organisation (Plowman, Solansky, et al., 2007). The scholarly discussion within this developing body of research focuses on the dynamics of leadership as it emerges within and across organisational systems (Dooley & Lichtenstein, 2008; Jäppinen, 2014).

The field of complex adaptive systems proposes an understanding of leadership as an emergent, relational, and context specific process. While this signifies a shift from leadership as an entity or the domain of one person, it does not diminish or ignore the individual as leader or designated positions of leadership. There is a clear recognition of positional leadership roles within organisations where there are administrative responsibilities or other role defined tasks to be undertaken. There are emerging theories

of complexity leadership within the literature that reflect these responsibilities (Uhl-Bien & Marion, 2009), where they define the administrative, adaptive, and enabling functions of leadership, as well as exploring how these approaches might be understood within bureaucratic environments. What is encouraged within these emerging perspectives is for all within the organisation to *be* leaders; that is, “to ‘own’ their leadership within each interaction, potentially evoking a broader array of responses from everyone in an organisation” (Lichtenstein, Uhl-Bien, Marion, Seers, & Orton, 2006, p. 8). Leadership, therefore, is enacted between people. “In this sense, complexity’s focus for leadership is literally the ‘space between’ individuals” (Lichtenstein & Plowman, 2009, p. 618). It is proposed, therefore, that leadership is a complex dynamic that emerges through contextual interactions that occur across the whole organisation: that is, leadership is a process of becoming (Woods, 2005). Within the context of this thesis, leadership is understood as being enacted by people with designated positions of leadership and by those without these positions, with attention given to how all people within the organisation can *be* leaders and influence the dynamic leadership processes occurring across multiple interactions (Lichtenstein & Plowman, 2009).

One of the key premises on which leadership is understood within complex adaptive system is that leaders participate in the system. This means, as Goodwin (2000) and Stacey (2003) both comment, leaders participate in the dynamic relations within the organisation, they do not perceive themselves as an observer of, or outside of, what is happening in the organisation. In respect to the relational ontology described above, such an understanding of leader as observer is untenable, as leadership is understood as a relational process where leadership emerges from within the system. One of the reasons some complexity theories (as outlined in Section 3.2) remain within a more positivist paradigm is because of the stance of the objective observer: the assumption that a leader can stand outside the system to understand the system. From the perspective of complexity theory:

[leaders] are always participants and the system evolves only because they participate in this local way. It is the very essence of self-organisation that none of the individual agents is able to step outside the system and obtain an overview of how the whole is evolving, let alone how it will evolve. (Stacey, 2003, p. 267)

Leadership, therefore, emerges from the process of participation in the system – within

and across multiple layers and across multiple scales (Dooley & Lichtenstein, 2008; Lichtenstein & Plowman, 2009). That is, the patterns of leadership can be identified through the minute-by-minute interactions, as well as through the patterns of leadership observed at the scale of groups or the system. An understanding of these patterns of leadership, repeated at multiple scales as well at multiple layers within the system, is a way of revealing the underlying patterns through which leadership emerges (Dooley & Lichtenstein, 2008; Schwandt, 2008). The interconnectedness of leadership across many dimensions of the system reflects a dynamic and connected organisational ecology (Dooley & Lichtenstein, 2008).

Having outlined the conceptualisation of leadership within the context of complex adaptive systems, the following section describes four specific leadership practices that are important in enabling emergent self-organisation. These are:

- 1 Disrupting existing patterns of interaction and thinking.
- 2 Creating dynamic connections.
- 3 Sense making.
- 4 Ethic of care.

The four leadership practices have been synthesized from a review of empirical studies exploring leadership within organisations that were either using the principles of complexity theory to guide their work, or were displaying characteristics of complex adaptive systems as they engaged in their work. Across these studies the focus was on both individual leader practices as well as collective leadership practices. These leadership practices contribute to the development of the original conceptual framework being developed in this chapter.

3.7.1 Disrupting existing patterns of interaction and thinking.

Across the studies reviewed (see for example, Lichtenstein et al., 2006; Plowman, Solansky, et al., 2007), leaders engaged in behaviours that had the effect of disrupting the existing patterns of interaction and thinking within the organisation. Disruption occurred when the usual ways of working, thinking, and talking about the work of the organisation were unsettled by such things as the introduction of new initiatives and how they might be enacted, or open discussions about issues and how they might be resolved (Lichtenstein et al., 2006; Plowman, Baker, et al., 2007). This enabled possible options and uncertain

outcomes to arise and be considered. Leaders in these contexts initiated constructive conflict, instead of the more traditional leadership focus of attempting to minimise or remove conflict (Plowman, Solansky, et al., 2007). In this way, leaders heightened the disequilibrium of the system, thereby altering the ecology of the system and increasing the possibility for emergent behaviours (Lichtenstein & Plowman, 2009).

If leaders were to disrupt existing patterns of interaction within the organisation, they needed to be closely connected to what was happening in the organisation. As one leader commented, it meant, “stepping into the process and becoming personally at risk in the process... finding out what was really going on and how things were really being done ... breaking through a veneer of denial... facing what was most feared and dreaded” (Regine & Lewin, 2000, p. 9). Leaders were open and active in their engagement in the processes of work, introducing new information and encouraging opinions. Leaders in these contexts were not afraid to take risks, ask questions, and explore new possibilities, as they began to understand more deeply the nature of their work. As Lichtenstein and Plowman (2009) identify, leadership enabled new patterns to emerge from the disruption, where these patterns often became the seeds of further disruption or change, as unexpected things happened and suppressed issues were surfaced. Such leadership practices placed pressure on the status quo of the organisation and pushed thinking and practice into the realm of uncertainty (Plowman, Solansky, et al., 2007).

In some of the studies reviewed (see for example, Lichtenstein et al., 2006; Uhl-Bien & Marion, 2009), leaders actively created uncertainty by engaging with the diverse personal knowledge bases that existed within the organisation and this encouraged a productive tension as leaders grappled with what this meant for their work. The diversity of perspectives often challenged people’s cognitive schemas, triggering a need to adjust ways of thinking to understand the newness emerging in the organisation. As Lichtenstein et al. (2006) comment, “These tension-related accommodations often generate completely new information; that is, ideas, innovations, and frameworks emerge that are unanticipated given the information currently available” (p. 5). Leaders in these contexts worked with a range of people to address challenges within the organisation, drawing on a breadth of perspectives, expanding not only the cognitive frameworks of individuals, but also of the system as a whole (Lichtenstein et al., 2006). While disruption and uncertainty were understood as necessary, Beabout (2012) offers an important insight that leaders

need to thoughtfully create the conditions for disruption within human social systems and not expect instantaneous and predictable responses.

In such environments it can be suggested that it was important for leaders to not only engage with experiences of uncertainty, but to acknowledge to others the uncertainty they were feeling, to actively understand the problems arising, and consider the choice or uncertain outcomes they were faced with (Plowman, Solansky, et al., 2007). In this way, leaders remained with the experience of the “unknowable” and didn’t retreat from unpredictable outcomes. It was the response to the disruption that was important, where leaders engaged in sustained interactions to address what has happening and, as Beabout (2012) comments, this response can be understood as learning through the interactions to address what is happening. This is in contrast to more traditional responses where a leader or manager might be expected to initiate and define the response (Lichtenstein & Plowman, 2009).

In summary, the findings and subsequent conclusions of the studies reviewed suggest that once existing patterns of thinking and interaction are challenged it is easier for emergent and novel ideas from all parts of the organisation to come forth and attract attention (Lichtenstein & Plowman, 2009; Plowman & Duchon, 2008). Such an environment, created by leaders, encourages experimentation and allows seeds of change to be amplified across the system (Lichtenstein & Plowman, 2009). As Plowman et al. (2007) suggest, “Our study revealed that the leaders contributed to the organization's instability by disrupting existing patterns, which then made it much more likely that emergent ideas would bubble up from within the organization” (p. 349). As one leader from this study commented, “The leaders turned this world upside down, in a good way” (Plowman, Baker, et al., 2007, p. 349). Leaders in these contexts enabled emergent futures rather than directing or controlling the future of the organisation.

The following drawing (Figure 3.9) visualises the leadership practice identified as *Disrupting existing patterns of interaction and thinking*, as well as some emergent characteristics of such a practice.

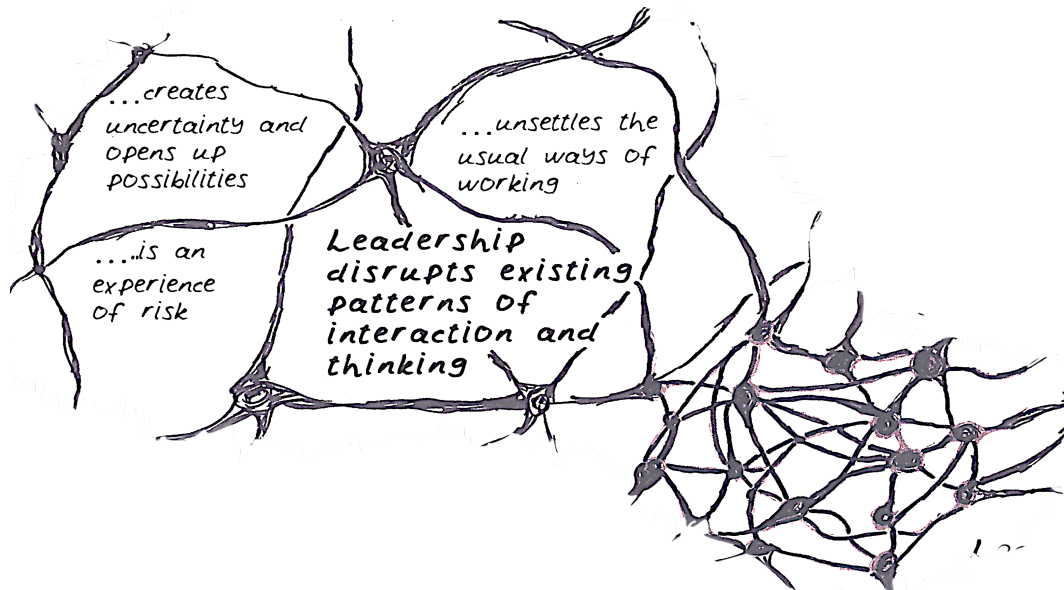


Figure 3.9. Disrupting existing patterns of interaction and thinking.

3.7.2 Creating dynamic connections.

In complex organisational environments, Plowman et al. (2007) and Regine and Lewin (2000) noted that leaders gave attention to creating dynamic connections among people within their organisation as a way of enabling the organisation's capacity to be adaptive and flexible. This focus on creating connections was not confined to individual interactions, but also included interactions within and between collectives and across the system as a whole having, as Lichtenstein and Plowman (2009) comment, "far-reaching effects across multiple levels of the organisational ecology, affecting the decisions and behaviours of individuals, work groups and organisations" (p. 627). It seemed important that, in these complex environments, leaders were able to take a whole of system perspective (Regine & Lewin, 2000).

Leaders who focused on creating connections were able to generate rich flows of information throughout the system; they advanced ideas and encouraged the exploration of possibilities, leading to innovation and change moving through the system (Plowman, Baker, et al., 2007; Uhl-Bien & Marion, 2009). These connections and flows of information created strong feedback loops, enabling those in the system to respond to changing internal and external environments (Regine & Lewin, 2000; Uhl-Bien & Marion, 2009). It is noted that leaders in these settings were adept at understanding the needs of the system and amplifying emergent learning or ways of working, that would expand the system's capacity to innovate (Lichtenstein & Plowman, 2009; Uhl-Bien &

Marion, 2009). In enabling information, ideas and feedback to flow through the system, leaders created connections that enhanced the capacity for learning at all levels of the system (Jansen et al., 2011).

The dynamic connections enabled rich and meaningful interactions and relationships to develop across the organisation (Lichtenstein & Plowman, 2009). Leaders created opportunities for people to come together in multiple ways over time, to share information, and to engage in in-depth and meaningful conversations, thereby enabling new ideas to emerge. In particular, Osborn and Hunt (2007) noted that dialogue strengthened interactions and relationships creating interdependencies within the organisation. A number of studies (see for example, Bradbury & Lichtenstein, 2000; Lichtenstein & Plowman, 2009; Lichtenstein et al., 2006) recognised that when leaders enabled connections they created a “relational space”. This was understood as a “space” where there was a shared context of mutual respect, trust and safety within the relationships (Lichtenstein & Plowman, 2009). In one case study, *The Sustainable Consortium* (Bradbury, Lichtenstein, Carroll, & Senge, 2008), the relational space was described in this way: “At the heart of the collaborative process we found a ‘Relational Space’ – a dialogical context of shared trust and learning that preceded the emergence of shared expectations or negotiated and supported projects” (p. 3). Other researchers, like Kurtz and Snowden (2003), suggest the trust and mutual respect within such spaces enables exploration and risk taking, with the potential for emergent knowledge and learning. However, they also acknowledged that such spaces often remain an untapped resource in organisations where there is strong centralised control.

In summary, it can be argued that leaders need to create connections across the system as a whole. Such connections create strong feedback loops that enable emergent ideas and ways of working to be amplified across the system, ensuring the system is responsive and adaptive to changing and often disruptive environments. Importantly, these connections, founded on meaningful dialogue, create relationships of trust and mutual respect that are deemed essential if new patterns of interaction and new meanings are to emerge.

The following drawing (Figure 3.10) visualises the leadership practice identified as *Creating dynamic interactions*, as well as some emergent characteristics of such a practice.

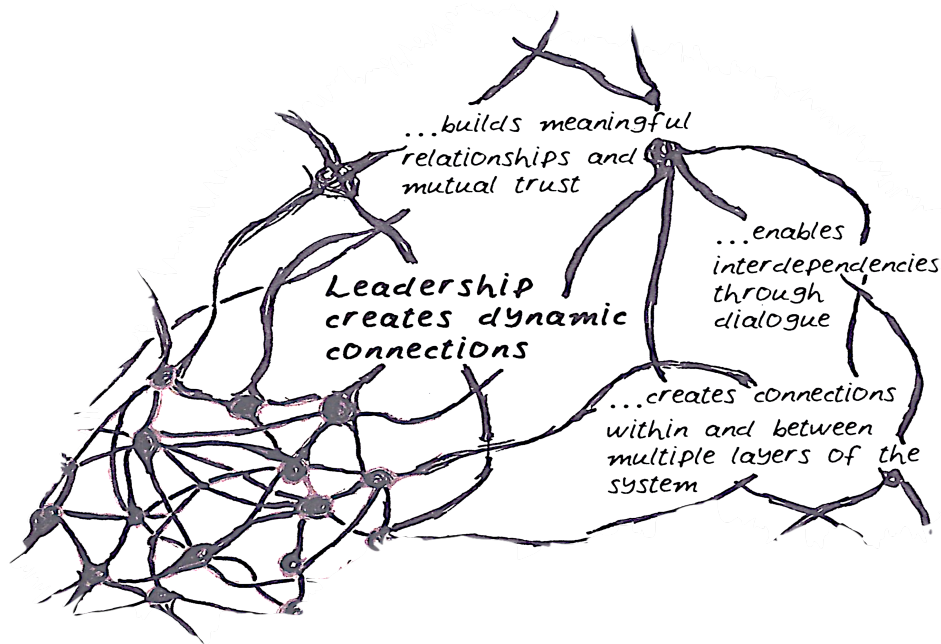


Figure 3.10. Creating dynamic connections.

3.7.3 Sense making.

Across the studies reviewed (see for example, Jäppinen, 2014; Lichtenstein & Plowman, 2009; Plowman, Baker, et al., 2007) leaders were identified as sense makers within their organisations offering meaning and purpose to the emerging situation, and encouraging others to make sense of the experiences as well. Jäppinen (2014), in particular, identified emergent sense making as a key collaborative leadership practice within complex systems, where sense making was described, “as giving meaning to unclear experiences when people deal with uncertainty and ambiguity” (p. 67). Across the studies reviewed there were particular leadership practices identified as sense making activities and when leaders engaged in these activities they were said to be acting as a “tag” in the organisation.

Lichtenstein and Plowman (2009) suggest leaders were identified as a “tag” when they directed attention to issues that mattered within the organisation, and to the emergent ideas or behaviours arising that might otherwise go unnoticed. Others in the organisation recognised this person as symbolising a valued purpose or direction that was being communicated throughout the organisation. “Leaders as tags” enabled individuals, collectives, and the organisation as a whole, to make sense of what was happening, to remain connected to the emergent changes and, in some situations, accelerate the process

of change (Plowman, Baker, et al., 2007). This was particularly important in the context of changing environments where there was uncertainty and often a range of possible outcomes to explore. Leaders, identified as tags, were able to notice forming patterns, and disrupt them or stabilise them, as well as seed desirable patterns by giving them attention (Kurtz & Snowden, 2003; Uhl-Bien & Marion, 2009). In these contexts, leaders guided the patterns of interaction and influenced the flow of information and learning throughout the organisation (Boal & Schultz, 2007). This collective learning was understood as a collective sense making activity of leadership across the system (Jäppinen, 2014). As Lichtenstein and Plowman (2009) comment, “When one or a few individuals accept the role of ‘tag’ as a symbol for an emergence process, there is a higher likelihood that ...self organisation will be increased in the system” (p. 625).

Leaders were also tagged as sense makers when they created opportunities for dialogue to explore and articulate shared understandings about the purpose of their work (see for example, Boal & Schultz, 2007; Jansen et al., 2011; Plowman & Duchon, 2008). Leaders brought attention to newly emergent ideas, important in shaping an evolving sense of purpose, through the use of language and through their day-to-day actions within the organisation. In the *Mission Church* study (Lichtenstein & Plowman, 2009), leaders whose work focused on ministry, began to talk about ministry “with” rather than ministry “to”; leaders consistently used language reflecting their values and organisational purpose in their everyday conversations. Such leadership actions, while enabling coherence by giving meaning to emergent behaviours, were also disruptive. New meanings and emerging purposes disrupted individual and collective meanings, as well as the accepted norms within the organisation (Plowman, Baker, et al., 2007).

Dialogue within the organisation was also identified as important for surfacing one’s own, and other’s, views and assumptions. The opportunity for challenging conversations, where different worldviews and perspectives are considered, was identified as important in discerning direction from an emergent order (Boal & Schultz, 2007). As Plowman and Duchon (2008) comment, “The emergent leader needs to be the enabler of many conversations because a broader and clearer understanding of ‘what we are’ and ‘what we do’ has a better chance of succeeding” (p. 148). Gunlaugson (2011), with references to the work of Scharmer (2007), specifically addresses the collective and interior nature of dialogue as a way of participating in the process of emergence. Dialogue engages the

individual and the collective in participating in the patterns of system discourse, culture and thought. “One might say that, in the field of dialogue, complexity awareness emerges” (Gunnlaugson, 2011, p. 6). Schamer (2007) suggests it is also possible for those in dialogue to move into a deeper field of conversation:

a deeper space of presence and connection with one another. They ...move into a generative flow of co-creating and bring forth something profoundly new.... You shift your identity and self in subtle but profound ways. You are more real; you experience your authentic self. (p. 237)

This perspective on the collective and interior nature of dialogue within organisations is an important consideration as it offer possibilities for exploring, at greater depth, the relational experience of dialogue that enables a collective co-enactment of the process of emergence within complex systems (Gunnlaugson, 2011).

In summary, sense making is an important leadership practice as it offers meaning and purpose to what emerges in the organisation. This was particularly important in uncertain and changing environments when there were various possibilities to consider. As sense makers, leaders created opportunities for dialogue, giving meaning to emergent ideas and behaviours, as well as promoting challenging conversations that revealed emergent learning, uncertainty and assumptions, thereby discerning renewed ways to progress the work.

The following drawing (Figure 3.11) visualises the leadership practice identified as *Sense making*, as well as some emergent characteristics of such a practice.

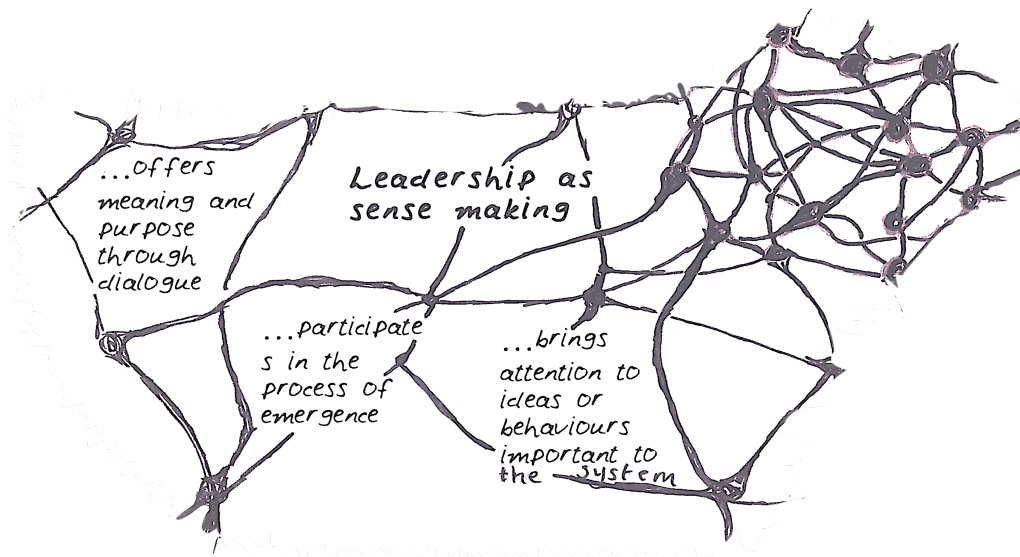


Figure 3.11. Sense making.

3.7.4 Ethic of care.

The final leadership practice identified as important in enabling emergence in an organisation is an ethic of care. While only Regine and Lewin (2000) named it in this way, other studies (see for example, Bradbury & Lichtenstein, 2000; Lichtenstein & Plowman, 2009; Lichtenstein et al., 2006; Osborn & Hunt, 2007) highlighted the importance of human relationships, in particular, the importance of diversity within human relationships and the interconnectedness between individuals and groups within organisations. The identification of an ethic of care within the literature reflects the growing interest in how relational caring is understood within organisations (de Villiers-Botha & Cilliers, 2010; Woermann, 2010). An ethic of care gives attention to the relationship, to an encounter that is caring and involves the *carer* being attentive and receptive to the *expressed* needs of the cared-for, rather than the *assumed* needs (de Villiers-Botha & Cilliers, 2010; Woermann, 2010). This section provides insight into how an ethic of care is enacted in organisations and how this practice is important in enabling emergence.

An ethic of care was identified as important because it focused the leader's attention on how human relationships are integral to the organisation, influencing the way people connected to the work of the organisation, to each other, and to the shared purpose and values of the organisation. Across the twelve organisations that were the focus of Regine and Lewin's study (2000) they identified a culture of care and connection as important; "a

culture where people cared about their work and about fellow workers, cared for the organisation and its shared purpose - not all the time but enough to define the valued behaviour” (p. 16). These relationships were enhanced by a meaningful engagement with diversity within the organisation, meaning, as Wicomb (2010) points out, that the subjectivities of the person and the differences within the relationships were regarded with integrity. It thus follows, as Cilliers (2010) points out, that if diversity is marginalised, not only is the ability to fully understand the organisation diminished, the human person is also diminished: “The removal of relationships, i.e. the reduction of difference in the system, will distort our understanding of the system. A failure to acknowledge this leads to error, an error that is not only technical, but also ethical” (p. 8). An ethic of care as a leadership practice, therefore, recognises the necessity of diversity in enabling a rich and dynamic organisation. Regine and Lewin (2000) noticed in their study that when there was a strong ethic of care as a leadership practice this “unleashed enormous human potential in the organisation” (p.8) because attention was given to relationships, and concomitantly, as Noddings (2012a) suggests, it is through relations that the potential of the human person emerges.

The leadership practice of an ethic of care brought into focus the human potential that existed within organisations (Knowles, 2001; Regine & Lewin, 2000). The human potential within organisations emerged when there was a deep commitment to the humanness of the other person: a commitment not shaped by a mechanistic view of the person as a cog in the organisational machine, but a commitment to engaging the whole person and enabling robust relationships between people. As Regine and Lewin (2000) commented in the findings of their study, “we can make our workplaces more humane; people can become fulfilled; people can be whole at work” (p. 23). Further to this, Jansen et al. (2011) identified how an ethic of care was present in the way leaders understood the importance of enabling the agency of each person within the organisation by creating a space for a person’s potential to be realised. These researchers identified an ethic of care in these organisations as; care for each other, care for relations, care for the values and purpose the system, and care for the system as a whole.

In organisations where an ethic of care was identified, Lichtenstein and Plowman (2009) also noted that the relationships were grounded in a sense of mutuality, where people were open to being influenced by each other and responsive to creating ways of working

that brought about continual change. Mutuality, understood in this way, changed the meaning of relationships within the organisation; a shift from linear and hierarchical based relationship, to an interconnected web of relationships. Such relationships enabled robust dialogue and adaptive and creative dispositions to emerge: “Mutuality lends itself to an appreciation of the wholeness of the other person, which increases the range of responses and possibilities between people” (Regine & Lewin, 2000, p. 12). Mutuality was identified as important in enabling the dynamic and non-linear connections necessary for emergence within complex adaptive systems.

In summary, an ethic of care as a leadership practice brings attention to the person and the importance of human relationships within organisations. A focus on an ethic of care influences how people interact, the kind of relationships that emerge, and how these are focused on enacting the organisation’s shared purpose. As Regine and Lewin (2000) suggest, an ethic of care creates the potential of the human person to be realised and, in turn, enhances the organisation’s capacity to be creative, adaptable and responsive to changing environments.

The following drawing visualises the leadership practice identified as an *Ethic of care* as well as some emergent characteristics of such a practice.



Figure 3.12. Ethic of care.

3.8 Conceptual Framework: Leadership Practices that Enable Emergence

Across the studies reviewed four leadership practices were identified as enabling emergence within the context of organisations as complex adaptive systems. Collectively, these leadership practices enable new ideas, new relationships, and new ways of being in the system to emerge and be amplified across the system. These leadership practices bring attention to the relational, dynamic, and contextual nature of leadership, and advance the idea of leadership as an emergent process within organisations.

The following figure (Figure 3.13) presents an overview of the four leadership practices and brings together the 4 drawings presented in each of the sections above.

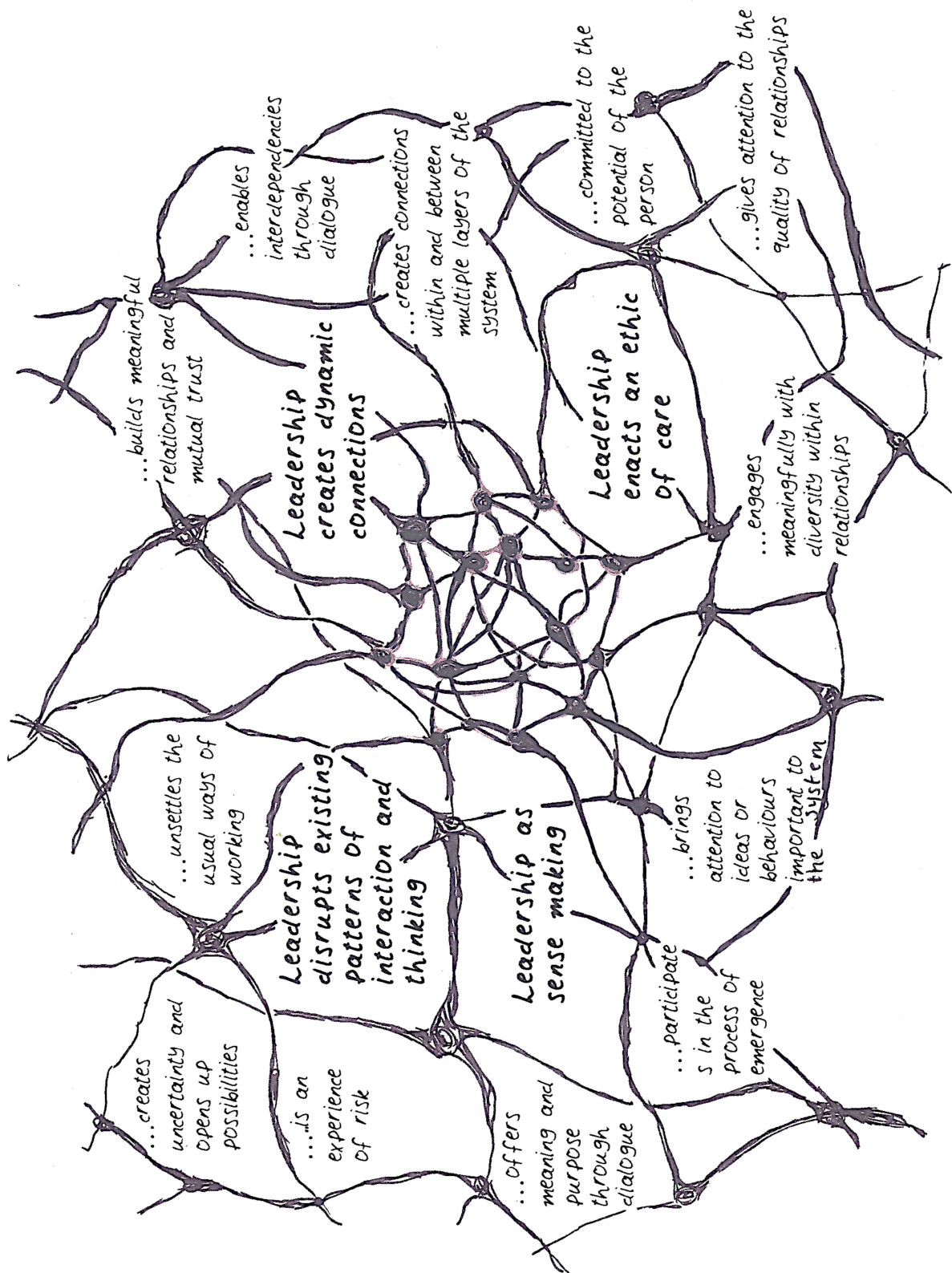


Figure 3.13. Conceptual framework - Leadership practices that enable emergence.

In the figure above (Figure 3.13), the leadership practices are represented as emerging within the “spaces in between” (Lichtenstein & Plowman, 2009) thereby attempting to communicate an understanding of leadership as both socially *constructed within* the social system as well as *transformative of* the social system. The studies reviewed suggested that the leadership practices emerged from the dynamic networks of interconnectedness across the system, where leaders actively participated in the system and, in doing so, enabled the conditions of emergence. Such practices, and ways of being a leader, created an organisational ecology founded on rich and meaningful relationships, focused on enabling the potential and capacity of human person and, in turn, the emergent capacity of the organisation.

The following figure (Figure 3.14) now presents the four conditions of emergence (red text) and the four leadership practices (blue text) identified in the review of the literature, in the one diagram. This final diagram that has been gradually developed over the course of this chapter, will be used to guide the *Discussion* in Chapter 6. This original conceptualisation and representation provides a conceptual frame for exploring the research question focusing this thesis.

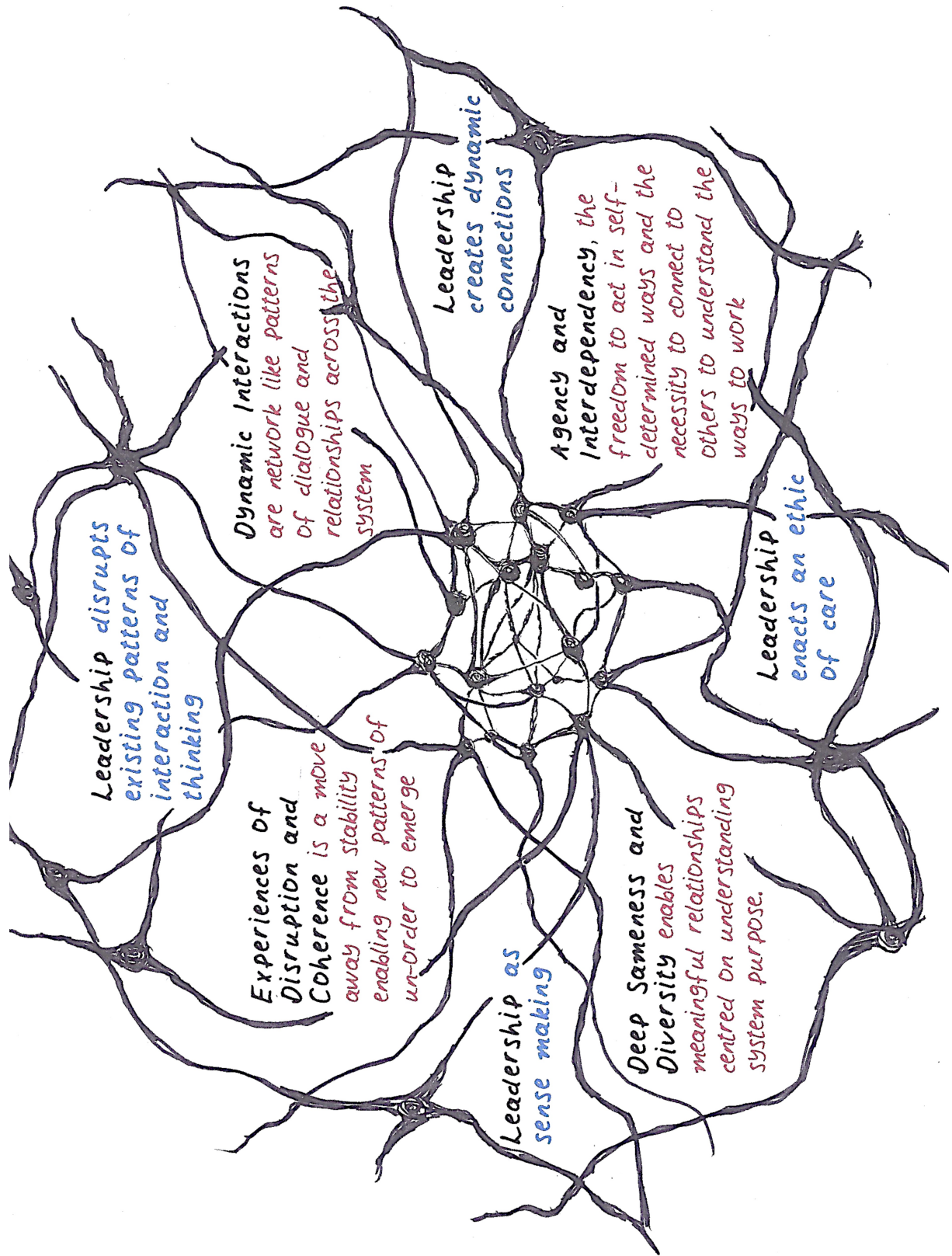


Figure 3.14. Conceptual framework – Conditions of emergence and leadership practices.

This chapter has argued that conceptualisations of organisations and models of leadership that have their foundations in the dominant organisational paradigm, underpinned by a neoliberal frame of reference, obscure the possibilities and potential of organisations and those that work within them. This chapter has presented an alternative perspective by describing organisations as complex adaptive systems and leadership as dynamic, relational, and contextual. Such an understanding has been explored through the use of a living systems view of organisations as a way of bringing attention to the dynamic, connected and emergent characteristics of organisations, in contrast to the more mechanistic or regulatory view that is often used to describe organisations like education systems. Drawings have been used to support this argument. The two different forms of representation will now be presented as a point of contrast – one reflecting the mechanistic view the other the living systems view

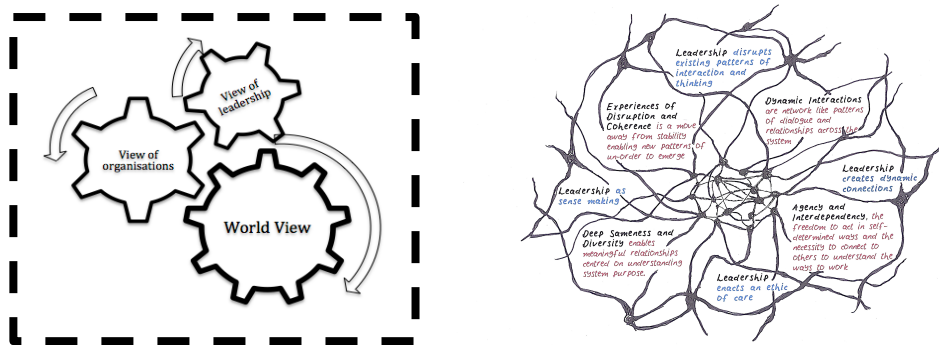


Figure 3.15. Image capturing the mechanistic view and the living system view.

3.9 Conclusion

Chapter 2 provided an examination of the current conceptualisation of organisations and the underpinning influences a neoliberal mindset has on shaping current views about education systems and leadership. Within this paradigm position, organisations are understood as rational and linear based structures designed to secure stability, efficiency, and predictable performance, with the expectation that leadership actions control the direction of the organisation towards highly prescribed outcomes (Plowman, Baker, et al., 2007). It was argued that this view of education systems diminishes the possibility of

system capacity building focused on learning for all, where the potential that exists within and between people in the system can be fully realised and focused towards sustained engagement with the organisation's moral purpose.

This chapter offered an alternative conceptualisation of education systems and the enactment of leadership by understanding education systems as complex adaptive systems and leadership as relational and socially constructed within these emergent environments. As an emerging organisational theory, complexity theory brings attention to the *whole* system, as nested and multiply connected to the broader environment. It brings attention to the patterns of rich interconnectedness within the system generative of emergent self-organisation. Importantly, as an emerging organisational theory, it transcends the existing regulatory and mechanistic mindsets prevalent in the current reform environment and opens up possibilities for emergent ways of thinking, working, and being within education systems. In situating education systems in the realm of the complex, the mechanistic view is deemed inadequate and archaic. However, a living systems view captures the deep and connected ecology of the organisation and its capacity for sustained engagement with its emergent purpose.

To exemplify how education systems can be conceived of as complex adaptive systems, and to explore the work of leaders in enabling system capacity building in these complex and emergent environments, I developed a conceptual framework from the synthesis of literature reviewed in this chapter (Figure 3.14 above). This conceptual framework will be used to explore the research question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

Complexity theory presents a fundamental shift in worldview and offers a dynamic, integrated, and emerging understanding of organisations, where the deep ecology of organisations can be explored (Capra, 2002; Wheatley, 2006). Within the field of educational research, little attention has been given to how complexity theory, as an emerging and contemporary organisational theory, might offer a way of understanding social contexts like education systems. This is a nascent field of study and it is the intention of this thesis to contribute to this field by engaging with complexity theory as a way of addressing the purpose of this research; to understand how one education system,

the CESM, enabled system capacity building by exploring the experiences of leaders in the context of the *Leading for Learning Project*.

The following chapter will outline the research design and how it provided a robust framework for achieving the purpose of this study.

Chapter 4

Methodology: Research in the Field of Complexity

The purpose of this research is to understand how one education system enabled system capacity building through exploring the experiences of leaders in the context of the *Leading for Learning Project*. The following research question guides this study:

How do leaders in an education system develop system capacity to enable sustained engagement with the moral purpose?

This chapter presents the paradigm position guiding the research design, followed by an articulation of the methodology, research methods, and analysis process. Full consideration is given to how the research design is understood within the field of complexity theory. In this thesis the methodology and the subsequent analysis and interpretative processes are outlined across two chapters:

- Chapter 4 provides a description and justification of the research design, followed by Phase 1 of the thematic analysis process - *Presentation of the data, initial analysis and interpretation*.
- Chapter 5 focuses on Phase 2 of the thematic analysis process – *Exploration of the thematic networks and their meanings*, leading to an identification of key findings.

This approach may be longer than expected, but given the purpose of the study, and in particular the challenge of understanding complex human social systems, I needed to develop an approach that allowed for an intense and intricate interpretation of the data. Complex systems are open systems and interact with, and are transformed by, the broader environment; therefore, I was challenged to describe properties that emerged as a result of the dynamic and nonlinear interactions across the multiple dimensions of the system. This led to the development of an interpretative process that was more heuristic than predetermined, and informed by the view that complete and defined understandings of these systems are not possible or even desirable (Preiser & Cilliers, 2010). However, while my orientation to the research process was exploratory, with an openness to multiple and alternative perspectives, the challenge remained of how to represent and understand the complexity of human social systems and reflect the diversity, particularity, and contextual concerns of leaders (Haggis, 2008), without seemingly to represent this in

a procedural manner. This challenge was a constant and productive struggle in this thesis, highlighting the limitations of the analysis process, but also identifying how such a process, influenced by a complexity ontology, provides renewed perspectives on how complex human social systems might be understood and then represented within studies.

4.1 Developing a Paradigm Position in the Field of Complexity

A paradigm position offers researchers an orientation towards a philosophical system or worldview that guides the researcher towards important decisions in relation to the research process (Guba & Lincoln, 1994; Neuman, 2006; O'Donoghue, 2007). Situating the act of research within a particular paradigm begins with the person of the researcher. The idea of the “biographically situated research” suggested by Denzin and Lincoln (2005, p. 21), makes explicit the understanding that the researcher is historically, socially, culturally, and politically situated and approaches the world with a set of ideas and questions to explore in particular ways.

The articulation of a paradigm position provides insight into the researcher’s perspectives on the nature of reality (ontology), how the researcher comes to know the world, and the relationship the researcher has with the known (epistemology) (Crotty, 1998; Guba & Lincoln, 2005). Consideration also needs to be given to values (axiology) within the development of a paradigm position (Guba & Lincoln, 2005), as Heron and Reason (1997) point out, understanding values is essential in defining the characteristics of a research paradigm, as it brings to the fore questions that explore “what is intrinsically valuable in human life, in particular what sort of knowledge...is intrinsically valuable” (p. 227). As outlined in Chapter 2, this is an important consideration for this research, intent on exploring a purpose of education that is centred the human person and how he/she grows into the fullness of their humanity.

It was argued in Chapter 3 that education systems are largely influenced by organisational theory that has its roots in a positivist and post positivist paradigm, where knowledge claims are both objective and generalisable (O'Donoghue, 2007), with little concern for contextual insights or the multiple relationships that constitute lived reality (Kincheloe, 2001). This is reflected in organisational structures that seek control and predictable ways of working towards prescribed and measurable outcomes, the key determinants of

organisational success (Jansen et al., 2011). The complexity of the world, characterised by pluralism and diversity, as well as uncertainty and disruption, means the practices of scientific rationality are limited and do not allow for opportunities to understand and explore this complexity (Preiser & Cilliers, 2010). Therefore, alternative paradigm positions, such as complexity theory, are needed that offer possibilities for representations of the world that can simultaneously engage with the shifting dynamics of systems, as well as the emerging unity of systems (Preiser & Cilliers, 2010).

In light of this understanding the following sections will outline the ontological and epistemological stance that guided the development of the research design and its enactment.

4.2 Ontological and Epistemological Stance

This research is situated within a relativist ontology where multiple realities can be conceived and understood as socially co-constructed (Guba & Lincoln, 2005). This interpretative frame includes a subjective epistemology where individuals and groups seek understanding and construct meaning as they engage in the social contexts in which they live (Crotty, 1998; Denzin & Lincoln, 2005). These subjective meanings are varied and multiple, presenting complex understandings of social phenomena (Creswell, 2003). Attention is also given to how the particular historical and cultural contexts influence the interpretations of these socially constructed meanings (Kemmis, 2008; Kincheloe, 2001). As researcher, guided by such an ontological and epistemological stance, I am focused on exploring the complex and multiple experiences of leaders and how they construct and reconstruct meaning across diverse settings. Attention is also given to interpretative processes that enable the unique experiences and perspectives of leaders to be explored, rather than processes that seek narrowly defined meanings.

A researcher's ontological stance also reflects the nature of the human being in the world and, according to Denzin and Lincoln (2008), is foundational in articulating a paradigm position and how it influences the enactment of research within human social contexts. This study, drawing on the scholarship of Reason and Bradbury (2008), views the human person as an embodied being that is part of the social and ecological order and radically interconnected with all other beings. Researchers adopting this perspective (see for

example, Freire, 1970; Heron & Reason, 1997; Kemmis, 2008) often express a desire to imagine and enable the fullest expression and capabilities of the human person (Guba & Lincoln, 2005). This view of the person is important to the purpose of this thesis; it brings to the fore questions of human flourishing within organisations and how the capacities of the person offer possibilities for renewed ways of working and learning, as well as ways of *being with* others and *being within* the system (Byrne, 2010).

This interpretative frame focuses my exploration on the multiple interactions of leaders, occurring over time within the different social contexts, and how subjective meanings emerge through the dynamic of these relationships (Haggis, 2008). In particular, attention is given to how knowledge is constituted within these relationships between individuals and, in turn, how knowledge and meaning is constituted within the system (Preiser & Cilliers, 2010). This highlights the importance of understanding “things in context” (Haggis, 2008, p. 161) where attention is given to difference and particularity. This means understanding people and practices in specific contexts, and the issues and subsequent meanings that arise in these contexts. As Preiser and Cilliers (2010) comment:

The two [meaning and context] do not exist independently, thus making it impossible to first sort out the system (or context), and then to identify the knowledge within the system. This co-determination also means that knowledge, and the system within which it is constituted, is in constant transformation. (p. 269)

This orientation is appropriate for this research, as it readily accommodates the dynamically connected and emergent nature of complex systems and rejects any attempt to isolate dimensions of the system or reduce understanding to limited dimensions of the system (Haggis, 2008). This means the project is understood as constituted of multiple interactions that both, connect those in the project to the broader education system, as well as constituting the broader education system across multiple contexts. However, within the broader discussions focused on methodology within the field of complexity, it is suggested by scholars such as Haggis (2008) and Preiser and Cilliers (2010) that such accommodations are not so straightforward, particularly when they are translated through decisions related to methodologies. One of the intentions of this study is to consider how the paradigm stance, outlined above, can accommodate an ontology and epistemology framed within complexity theory, and in what ways it might offer an expanded conceptualisation of social inquiry (Byrne, 2005; Haggis, 2008). The particular challenge

confronting this study is how to explore the interactions and processes *between* people, as well as the unique experiences and individual differences of leaders in a meaningful way. Notwithstanding these challenges, scholars such as Haggis (2008), Horn (2008), and Preiser and Cilliers (2010) suggest, that as research within the field of complexity engages with forms of social inquiry there will be increased opportunities to experiment with the potential of complexity theory in offering expanded conceptual frames for interpreting and understanding complex phenomena like human social systems.

In summary, the ontological and epistemological stance guiding this research design acknowledges the dynamically connected and emergent nature of complex systems, as well as enabling the system to become the complex system it is capable of being (Horn, 2008). This stance, therefore, is able to offer possibilities for understanding complex human social systems, with a view to seeking renewed ways of thinking, working, and learning in education systems (Haggis, 2008).

The following sections will now outline the research methodology, the subsequent methods for data gathering, and the process use for analysing data.

4.3 Ethnographic Methodology

Ethnography is the selected research methodology for this study. It is situated within the ontological and epistemological stance outlined above and, in turn, this influenced the way in which the study was undertaken and how the personal and situated experiences of leaders were described, interpreted, and represented (Tedlock, 2003). Historically, ethnography has been associated with the domains of anthropology and sociology, providing descriptive accounts of a community or culture, usually derived from long periods of time in the field, and in contexts very different from the experiences of the researcher (Brewer, 2005). In more recent times ethnography has been broadly applied to diverse forms of qualitative research in a range of disciplinary contexts, resulting in varied meanings and applications (Hammersley & Atkinson, 2007). As Wall (2015) suggests, researchers are now using ethnography beyond its original conception in response to new questions and purposes, highlighting how ethnography has been reinterpreted and recontextualised in response to complex and shifting circumstances leading to a constant distilling of its meaning and application.

An ethnographic methodology readily accommodates the dynamic, connected, and emergent nature of complex systems (Haggis, 2008). As Guba and Lincoln (2005) comment, ethnography grounded in a relativist ontology and subjective epistemology, values multiple constructed realities, where the researcher and participants interact and co-create understanding and knowledge through their dynamic relationships. As Timmermans and Tavory (2007) explain, ethnography “aims to learn about how and why people behave, think and make meaning as they do in the daily unfolding of life” (p.497). Ethnography also promotes a view of the researcher as participating in the setting; in adopting this stance, I have deeply engaged with the context and interacted with leaders, enabling me to develop rich and detailed interpretations of their experiences and the social context through the analysis process (Lewis & Russell, 2011). A further consideration is the researcher’s attitude to “being there” in the setting: an attitude of openness to the complexity and diversity of life through observations, encounters, and conversations (Lewis & Russell, 2011). This explanation of ethnography aligns with a key premise of complexity theory, that those seeking to understand the system do so by participating in the dynamic relationships within the system (Goodwin, 2000; Stacey, 2003).

The exploratory and open-ended orientation of the ethnographic methodology enabled me to attend to a broad range of experiences across multiple settings. I was able to remain critically open to the particularity, diversity, and connectedness of the experiences of leaders (Haggis, 2008), with a gradual refinement of focus given to the research question guiding the study (Hammersley & Atkinson, 2007). This orientation aligns with Preiser and Cilliers’ (2010) view that understandings of complex systems emerge over time and are facilitated through an exploratory process requiring an openness to possibilities and diverse perspectives. However at some point in the ethnographic process there is a refinement towards patterns or themes, as Agar (2006) comments, “Ethnographers are on the lookout for patterns” (p. 18). This process of refinement was one of the challenges grappled with in this study and resulted in a detailed and intricate analysis that required a continual reengagement with the particular and unique experiences of leaders (Haggis, 2008). This issues and questions that arose from this challenge will be explored in Section 4.7 *The Thematic Analysis Process*.

The central purpose of ethnography can be understood as focused on the depth of human understanding and relationships, fostered through an intimate familiarity with the day to day experiences of those in the setting (Brewer, 2005; Wolcott, 1995). An ethnographic methodology therefore, is appropriate for the purpose of this study, where the setting – the project and the broader education system context - is understood in terms of its human interactions and relationships, and where the focus of the research is to deeply understand these human experiences (Haggis, 2008).

4.4 Researcher as Participant and the Practice of Reflexivity

As a member and leader within the *Leading for Learning Project* I adopted a researcher as participant stance. The affordances of this stance, in respect to the purpose of the research, and the issues that arise from such a relationship, will be discussed. The blue circles in the following figure (Figure 4.1) indicate where I was located within the project structure, I also engaged at times with some of the Regional Project Teams.

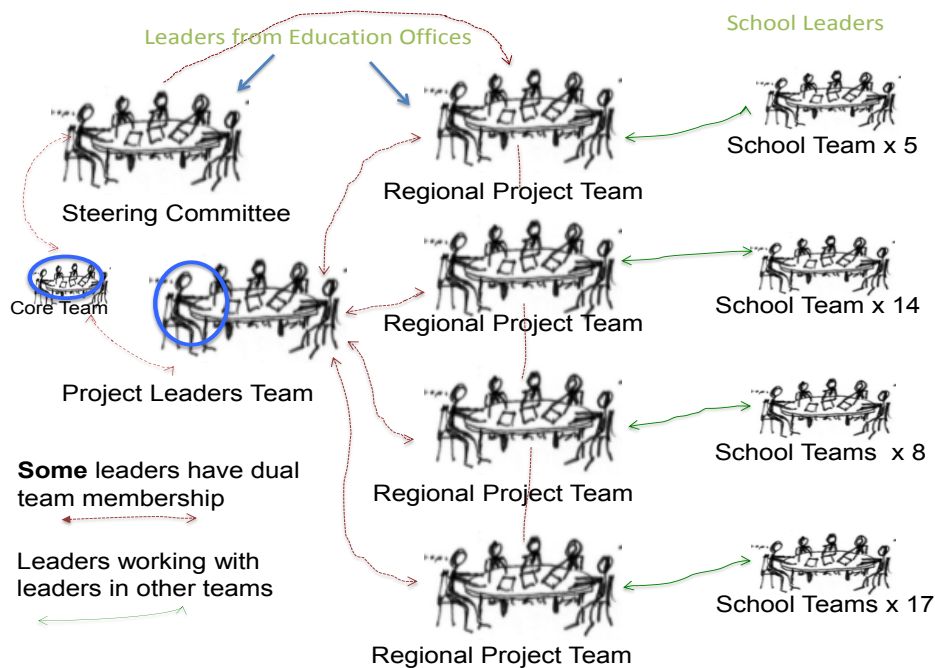


Figure 4.1. The place of the researcher in the *Leading for Learning Project*.

The figure above shows my position in the *Core Team* and in the *Project Leaders Team* where I had an overall leadership role working directly with two other leaders. I contributed to the work of the project in multiple settings, giving me a familiarity with the experiences of leaders in across the project, as well as insight into the worldview of the broader education system (Lewis & Russell, 2011). This positioning reflects the ethnographic principle of ‘being there’ in the everyday experiences; watching, listening, and asking questions through formal and informal interviews, with a continual focus on the complexity of leaders experiences (Hammersley & Atkinson, 2007). It is important to note that my role as a project leader was not a supervisory role and did not include any responsibilities in relation to the performance of project members.

The stance of researcher as participant is understood within the context of the collaborative and inquiry focussed ways of working of the project that were underpinned by respectful relationships, diversity of view, and open dialogue (CEOM 2010b). As researcher I was present in the relationships within the setting, and as Wolcott (1995) comments, this is a dynamic experience, as “the numbers are small, the relationships are complex, and nothing occurs exactly the same way twice” (p. 19). The researcher as participant stance was underpinned by the belief that research is enacted with others, not done to others or on others (Heron & Reason, 1997; Kemmis, 2008); this belief guided my stance in all phases of the research (de Laine, 2000).

Self-reflexive practices were important in understanding the researcher as participant stance and in bringing multiple levels of awareness to the research process. It is one of the strategies identified as integral to achieving trustworthiness of the research (see Section 4.10). The process of reflexivity enabled me to consider how the personal, social, and cultural contexts in which I was situated influenced my actions and the way I constructed the interpretive accounts of the experiences of leaders (Etherington, 2007). The process of critical reflection was active and ongoing, continually probing what I knew and how I came to know (Guillemin & Gillam, 2004). Hence, reflexivity was integral to the analysis and interpretative process, captured in the formal and informal documentation of the analysis process and in the reflections in the researcher’s journal.

The issue of researcher bias is an important consideration within this study because as a

participant researcher I was involved the following: gathering data through direct engagement with participants; selecting responses to probe within the interviews; selecting who to observe and interact with (Kawulich, 2005); what to record in the field notes and how observations were framed (Emerson, Fretz, & Shaw, 2002). The self-reflexive practices I undertook ensured the challenges and contingencies of the research process were continually surfaced and understood in light of the “ground in which one stands” (Heron & Reason, 1997). There are also ethical considerations to be addressed in relation to the researcher as participant stance; these will be addressed in Section 4.11 of this chapter.

4.5 Participant Selection

As outlined in Chapter 1 the *Leading for Learning Project* was a system initiated professional learning project. Before describing how the participants were selected from the membership of the project for the purpose of this study, a brief outline will be given of how participants were selected to be in the project. Appendix A provides an overview of the overall project membership.

The process for determining which schools participated in the *Leading for Learning Project* was invitational and based on conversations between education leaders from regional offices and school leaders. The invitation was offered to those schools that were beginning to explore the questions that the project was interested in addressing. These conversations ensured that school teams were aware of the intentions of the project, the design of the project, and the action orientated way of working. With this information school leaders decided whether this project best suited their context and learning needs. Principals selected their own teams that were inclusive of a school leader/s, a Learning and Teaching Leader, and a leader of Religious Education.

The process of determining the participation of education office leaders in the *Leading for Learning Project* was directly related to a leaders ongoing work in the area the project was exploring. However, all leaders with a focus on Learning and Teaching or Religious Education were in some way engaged in the work of the project. This selection process, for both school leaders and education offices leaders, meant there was a high degree of ‘readiness’ and willingness to be in the project and explore the overall project question, as

well as a high commitment to such a focus for change. However, the project design and the uncertainty that followed also meant there were significant experiences of frustration, confusion, and challenge, and at times resistance.

Participant sampling took place from within the membership of *Leading for Learning Project* (Appendix A) using criteria to purposefully select participants for the study (Appendix B (a)). The sampling strategy gave attention to the purpose of the research, maximising the potential for the researcher “to discover, understand, and gain insight...from [participants] which most can be learned” (Merriam, 1998, p. 61).

The following table (Table 4.1) outlines the sample of participants selected from the project membership. The table also shows the number of participants from the selected sample that accepted the invitation to participate. The letter inviting participants to participate and the accompanying consent forms are included as Appendices (Appendix C and D).

Table 4.1

Overall Participant Sample

Project structure	Participant sample selected from within the project	Rationale for selection
Steering Committee	5 Steering Committee members selected 4 members agreed to participate	This sample represents a lateral layer of the project, reflecting the management layer of the CEOM. The participants are also located in different office contexts (one central and four regional office locations of the CEOM).
Project Leaders Team	7 Project Leader Team members selected 7 members agreed to participate	This sample represents a diversity of experience across vertical and lateral structures of the project. The sample includes members from the four different Regional Project Teams, and members from the central office of CEOM. The sample includes members with different leadership roles.
Regional Project Teams	Two Regional Project Teams were selected with 10 participants in total across the two Regional Project Teams 9 members agreed to participate	Represents a lateral layer within the project. This selection also represents a vertical connection (the Regional Project Teams are connected to the Project Leaders Team the Regional Networks)
Regional Networks	Two of the four Regional Networks were selected with 5 and 17 school teams respectively – approx. 80 participants across the two networks. 63 members agreed to participate * (*approx. 20 absentees on the days for Participant Observations)	Represents a vertical and lateral layer within the project. Each Regional Network includes members of school teams and members of the Regional Project Team. The two Regional Networks selected have differentiated structures providing varied contexts for exploration.
School Teams	Three school teams selected with 14 participants in total 14 members agreed to participate	School teams selected were included in the Regional Network sample above. The three school teams were from across two different Regional Networks. School Team membership included the Principal and at least a Teaching and Learning Leader and/or Religious Education Leader to provide breadth of perspective in relation to the leadership experience of the project.

The purposefully selected sample ensured leaders from different structural, management, and leadership dimensions of the project were included in the research, as well as reflecting the vertical and lateral organisational structures. This sampling was intended to increase the opportunities for multiple perspectives to inform the descriptions and interpretations within the data analysis process (Creswell, 2008).

4.6 Data Gathering Strategies

The data gathering strategies used for this research include one to one interviews, focus groups interviews, participant observations, and an online survey. Within the one to one interview context participants were invited to create a drawing of their experiences as leaders within the context of the *Leading for Learning Project*. As Prosser and Loxley (2007) comment, the use of both word-based and visual strategies provided access into the multiple and complex experiences of leaders, thereby expanding the understandings about the work of leaders and illuminating what is known by leaders.

The range of data gathering strategies provided scope for participants to engage in open discussions and share their experiences and interpretations of phenomena that was of interest to them, within and beyond the context of the *Leading for Learning Project*. The data gathering strategies employed for this study align with the epistemological framework guiding this research; that knowledge and understanding are constructed and reconstructed through practices, interactions, and experiences (Merriam, 2010).

The following table (Table 4.2) provides an overview of the data gathering strategies in relation to the sample of participants across the project. The anticipated number of participants engaging in the different strategies changed over the course of the data gathering phases. This was due to the following reasons: time constraints on individuals and groups; illness of participants; non-attendance on scheduled days; and, non-returns on surveys. The ambitious nature of the data gathering also became apparent and led to some changes in the scope of the data gathering across the sample. However, while adjustments were made continual reference was given to the criteria and on all occasions the criteria were fulfilled (Creswell, 2008).

Table 4.2


Overview of Data Gathering Strategies

Project structure	The participant sample	Overview of data gathering strategies within the sample of participants			
		One to one interviews (including drawing)	Focus groups (FG)	Participant Observations (P.O.)	Online Qu.
Steering Committee	4 participants	2	1 FG (3 people)	Not Applicable	0 response
Project Leaders Team	7 participants	3	1 FG (4 people)	2 sessions (5-7 present)	3 responses
Regional Project Teams	The two Regional Project Teams 9 participants	2 (One from each region)	1 FG (3 people)	1 session (5 members)	9 responses
Regional Networks	Two Regional Networks One network 5 school teams One network 17 school teams 63 participants across the two networks.	Not Applicable	0 FG	2 sessions (One in each Region -all schools present in each)	2 responses
School Teams	Three school teams selected with 14 participants	Not Applicable	3 FG (4 people, 5 people, 5 people)	Not Applicable	Not Applicable
Total	83 Unique Participants	7 Interviews	6 Focus Groups	5 Participant Observation	14 Online Surveys Submitted

The following table (Table 4.3) provides an overview of the sequence of data gathering steps.

Table 4.3

Overview of Data Gathering Steps

Steps	Order of Data Gathering Strategies	Parallel Processes
Step 1.	Pilot Process Pilot process for online survey, interview questions and focus group questions	
Step 2.	Undertake the process of Participant Invitation	Ongoing self reflexive practices begin and continue
Step 3.	Send out online survey Return of online survey Adjustments to Interview questions and Focus Group questions in relation to preliminary analysis of online survey data	Initial analysis process begins and continues in an iterative way.
Step 4	Participant Observations Project Leaders Team (2 sessions) Regional Project Team (1 session) Regional Network (2 sessions) Participant Checking of observations	
Step 5	Focus Group Interviews Steering Committee Project Leaders Team Regional Project Team School Teams Focus Group: Participant Checking Process	
Step 6	Interviews and Participant –generated drawings Steering Committee Project Leaders Team Regional Project Team Interviews: Participant Checking Process	

Each of the data gathering strategies will now be addressed, outlining how they advanced the research purpose and the way they were used within the study. They are presented in the order as they appear in Table 4.3 above.

4.6.1 Online survey.

An online survey was used to gather data across the participant sample (see Table 4.1 above) in order to: provide participants with an opportunity to respond anonymously to questions, and at their own pace; provide responses with which to shape the interview questions; and, to confirm the refined codes during the thematic analysis process.

The questions used for the online survey were piloted with a small group drawn from the participant sample. The table outlining the number of invitations sent to participants and the total number of completed surveys can be found in Appendix B (b).

The structure of each section of the online survey included an initial rating scale followed by opportunities for extended text responses. The questions were open-ended allowing for a range of possible responses and for participants to respond from their experiences, rather than respond to researcher defined experiences framed within the questions (Creswell, 2008) (Appendix E provides an outline of the online survey questions).

4.6.2 Participant Observation.

As a participant researcher I undertook the role of participant observer during each of the designated sessions. The sessions were conducted early in the data gathering steps (Step 4, see Table 4.3 above) to assist in establishing my identity as the researcher and to assist in refining the designs for the interviews (Mack, Woodsong, MacQueen, Guest, & Namey, 2005).

Participant observation is a foundational method within ethnographic methodology as it enables researchers to be immersed in the setting under study and to understand the breadth and complexities of human experiences from the perspectives of participants (see for example, Kawulich, 2005; Lewis & Russell, 2011; O'Reilly, 2009). In particular, the observations provided me with insights into “things in context” which according to Haggis (2008), is important if researchers are to understand the diversity and the

particularity of the settings. The participant observation sessions provided an opportunity for me to explore the patterns of interaction between leaders and how new ideas emerged across the different teams within the *Leading for Learning Project*.

Central to understanding participant observation is the mindset the researcher has to “being there” in the field (Wolcott, 1995). As researcher, I was not observing the participants in the *Leading for Learning Project* from an impersonal or detached position (de Laine, 2000), but rather, I was a *participant* observer in a collaborative and inquiry focused project setting (Denzin & Lincoln, 2005; Yin, 2009). This signaled a respect for the established norms within the project, and the belief that learning with and from each other was integral to the espoused theoretical frames guiding the study.

The settings for the participant observations and the sample of participants can be founded in Appendix B (c). During each of the sessions, observations in the form of descriptive field notes were recorded in a research journal (Mack et al., 2005). The descriptive field notes were accompanied by reflective field notes recording emerging ideas, themes, insights, and questions as they arose (Creswell, 2008). The following summarises the process:

1. Short notes made at the time.
2. Expanded notes made as soon as possible after the session.
3. Use of a reflective journal to record challenges and ideas that arise during and after the session.
4. Documenting the ongoing interpretative account of the research

(Mack et al., 2005; Silverman & Marvasti, 2008)

In circumstances where participants within the settings declined to participate no direct observational documentation was made involving those participants nor did I interact with those participants.

4.6.3 Interviews.

Two interview strategies were used within this research design - one to one interviews and focussed group interviews – and I was the interviewer in both contexts.

The subjective epistemology guiding this research understands the interview as a conversation of constructed and negotiated meanings, influenced by context and a reality that is ongoing and interpretative (Denzin & Lincoln, 2005). The interview offered the participants and me an opportunity to delve deeply into their experiences, to explore feelings, to reflect on events, and raise concerns.

All interviews were digitally recorded and then transcribed by a professional agency. I then checked the audio files against the transcripts to ensure the exact phrasing was recorded.

4.6.4 Focus group interviews.

Six focus group interviews were conducted engaging 24 participants. The focus groups were purposefully selected to reflect different layers of the project and to represent groups that work together within the project structure.

The purposeful sampling of participants was based on the assumption that participants already working together will create an environment conducive to extended discussion around shared experiences (Creswell, 2008). The use of focus groups provided an opportunity for in-depth understandings of subjective meanings and the exploration of the different views present within the group (Fontana & Frey, 2005). The table outlining the sample and rationale for focus group interviewee selection can be found in Appendix B (d).

Each focus group was approximately 60 minutes in length and was guided by a protocol that included an introduction for participants and the questions that I would ask as interviewer. Appendix F outlines the script and the questions for the focus group interviews.

4.6.5 One to one interviews.

The purpose of the one to one interviews was to provide each interviewee an opportunity to explore their experiences, feelings, and perceptions in relation to the project and to generate understandings that might provide insight into the research question (Creswell, 2008; Merriam, 2010). The interviews allowed for further

development of ideas, issues or themes that were raised in the focus groups. Important within the process was my ongoing reflection and critique of my subjectivities as I explored with leaders their experiences and engaged in constructing meaning with leaders (Harrison, MacGibbon, & Morton, 2001). It is acknowledged there might be issues related to a participant's willingness to respond openly due to perceived power relations within the interview. This potential issue is considered in Section 4.11 *Ethical Considerations*.

Seven, one to one semi structured interviews were conducted across the overall sample of participants. The table outlining the sample and the rationale for interviewee selection can be found in Appendix B (e). Each interview was approximately 40-60 minutes in length and guided by an interview protocol that gave an outline of the purpose of the interview, the questions to be asked, and some prompts to probe or seek further clarification (Creswell, 2008). The structure of the one to one interviews included seven predetermined questions for all interviewees. Each question was followed by some open-ended questions or prompts for exploration. The development of the questions was guided by the overall research purpose and question and previous data gathered during participant observations and focus groups interviews (Appendix G provides a full account of the interview process).

The interview process also included an invitation to participants to draw about how they understood and interpreted their experiences as leaders within the context of the *Leading for Learning Project* (Guillemain, 2004). The inclusion of participant generated drawings had a clear relationship with the methodological stance of the research and offered an opportunity to explore the complex and dynamically constituted context in which leaders were engaged (Pederson, 2008). Gauntlett and Holzwarth (2006) suggest that inviting participants to draw as part of an interview process offers the possibility of a different kind of response; it provides time and embraces the creativity and reflexivity of participants. Participants were invited to draw and then engage in their own interpretations towards the end of interview process, however some participants began drawing spontaneously during the interview to assist them with their verbal explanations. However, as will be described below, a detailed analysis of the participant generated drawings was not possible.

Further detail about the participant generated drawings as a method can be found in Appendix H.

The four data gathering strategies generated a considerable amount of data. Although it was initially anticipated that all data would be used within the analysis process, as the research progressed it became apparent that it was beyond the scope of the thesis to fully present, analyse, and document the process of analysis of all data. However, given the particular purpose of each data gathering strategy and the complementarity between each of the strategies, all data informed and influenced the ongoing analysis and interpretation. Consequently the decision was made to directly use the data from the focus groups and one to one interviews. Some participant-generated drawings have been included to support the text, but have not been subject to visual analysis methods.

4.7 The Thematic Analysis Process

The final sections of this chapter will focus on the thematic analysis process used in this study, with particular attention given to Phase 1 of the process (see Figure 4.2 below). As outlined at the beginning of this chapter the methodology and the subsequent analysis processes are outlined across two chapters - Chapter 4 and 5. This approach has allowed for an iterative research process where understandings of the experiences of leaders and their contexts continually evolved in response to the multiple layers of the analysis process. This resulted in an intense and intricate interpretation of the data, presented in the following sections and accompanied by Appendix I (a) – (n).

The thematic analysis process used in this study draws on the work of Attride -Stirling (2001) with some adaptation to suit the purposes of this research. Thematic analysis can be described as a series of iterative phases that give detailed attention to how the process of analysis is undertaken, and how thematic networks are developed within the process and used for further analysis. As Attride- Stirling (2001) suggests, the exploratory nature of the process brings into consideration the meaning, richness, and possibilities of the subjective experiences of those in the social setting, as well as the researcher's sensitivities to the complexity, contingency, and fragility of these experiences and views.

The following figure (Figure 4.2) presents a visual representation of the thematic analysis process, as used in this study, and attempts to capture the iterative nature of the phases.

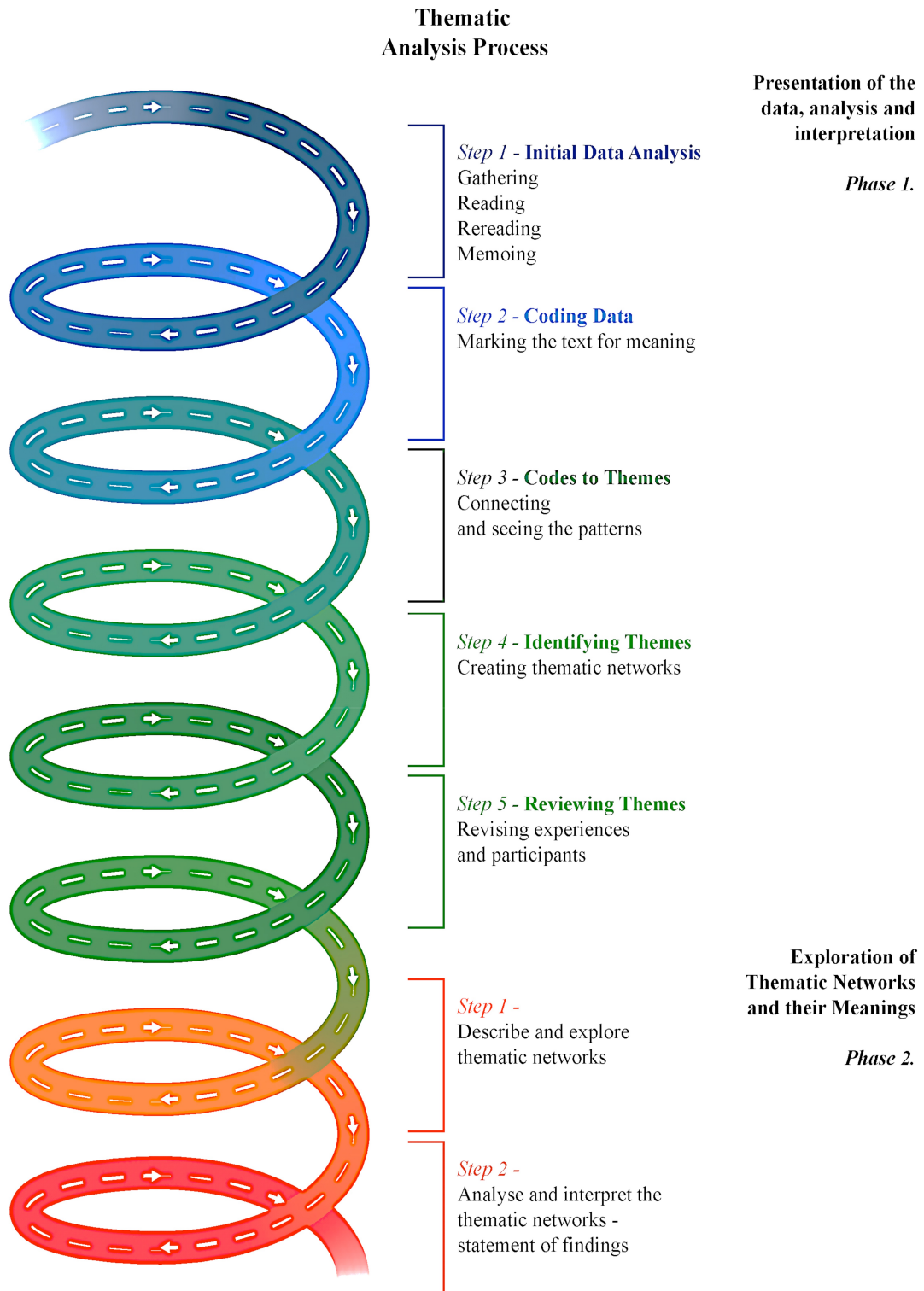


Figure 4.2. Thematic analysis process.

The iterative nature of the thematic analysis process means the initial data analysis was conducted simultaneously with the ongoing data collection, the self-reflection process, and the process of constructing early interpretative accounts. As researcher, I was engaged in multiple steps simultaneously, meaning that each step in the process was never encountered in the same way, because of the continual influence of the multiple stories emerging through an exploration of the data (Merriam, 2010; Silverman & Marvasti, 2008). The data collection process therefore, was conducted within the mindset of what was emerging through the ongoing analysis and self-reflection process. This enabled me to flag tentative findings in relation to the research question, but which continued to be reworked in light of subsequent data (Merriam, 2010; Silverman & Marvasti, 2008). This interactivity within the analysis process demonstrates the principle of “goodness”, identified as a quality of research trustworthiness. As Tobin and Begley (2004) comment, “Goodness ... becomes an overarching principle of qualitative inquiry and an interactive process that takes place throughout the study” (p. 391).

The first phase of the thematic analysis process is similar to approaches used in grounded theory, where memoing and coding processes bring attention to the relationships between key concepts and themes (Timmermans & Tavory, 2007). This orientation towards grounded theory in the initial stages of analysis instilled a deep familiarity and awareness of the corpus of data, with a constant return to the full transcripts and experiences of participants in the setting (Timmermans & Tavory, 2007). However the thematic analysis process adopted for this study does not attempt to discover new theories, but rather engages with existing theories of complexity, as conceptualised through a review of the literature in Chapter 3. This study, therefore does not claim to be fully situated within the scholarship of grounded theory, but some identifiable characteristics of grounded theory have been used and developed in response to the purpose of this research (Bryant & Charmaz, 2007).

While the process of thematic analysis, and the development of thematic networks, is common in qualitative studies, Attride-Stirling (2001) suggests that what is missing is disclosure of the actual analysis process. This research gives particular attention to detailing the process of thematic analysis (as outlined in Figure 4.2 above) in an attempt to provide evidence of the integrity and competence within the process; that is, to demonstrate the in-depth planning, care, and attention given to the experiences of the

participants and the context of their experiences (Attride-Stirling, 2001; Fereday & Muir-Cochrane, 2006). Providing clarity about the analysis and interpretation process offers transparency about how the data was used, and the decisions made in relation to the generation of codes and themes throughout the process (Fereday & Muir-Cochrane, 2006; Ryan & Bernard, 2003). The inclusion of self-reflective notes from the *Researcher's Notebook* provides access to my thinking and decision-making processes, thereby demonstrating how my beliefs about the nature of reality, truth, and knowledge directly influence decisions I made throughout the study. As Mantzoukas (2004) comments:

if the researcher is to help readers understand and evaluate the value of the research, he or she must state clearly all the way through the study his or her decisions, why they were made, and how they relate to the fundamental epistemological and ontological propositions. (p. 1003)

The decision to provide a detailed account does not assume a “more accurate” or “truthful” representation of the research, but rather an account that reveals the challenges of representing the human experience within qualitative research (Denzin, 2002). As researcher, I hold the belief that the representation of participant experiences will always remain incomplete, but that the researcher strives to ethically show a contingent, layered, and dynamic representation of the complex nature of human experiences (Kuntz, 2010). As Denzin and Lincoln (2008) suggest:

there is no clear window into the inner life of an individual ... individuals are seldom able to give full explanations for their actions or intentions; all they can offer are accounts or stories about what they have done and why. (p. 29)

In taking this position I make evident the assumption of shifting identities, and constructed and multiple realities, reflecting the multifaceted experiences and understandings of social phenomena within the research setting (Guba & Lincoln, 2005).

A complex human social system like an education system cannot be understood by analysing a part of the system or taking components of the system apart, rather researchers are challenged to describe and understand that which is connected and unique and emerges through dynamic interactions (Preiser & Cilliers, 2010). This can present particular challenges when designing interpretative processes that seek to understand complex human social systems. As has been highlighted, the challenge for me was to ensure that the particularity and the diversity of the experiences of leaders was not

rendered invisible by transcending the individual and bringing attention to broader groups or categories (Haggis, 2008). This challenge is acknowledged, along with the possible limitations of thematic analysis, but also with the opportunity to explore how the process of identifying codes, themes, and eventually thematic networks can be understood as illuminating a dynamic process or interaction within the system, rather than naming discrete and static categories (Haggis 2008).

In Phase 1 of the thematic analysis process thematic networks are developed and then in the Phase 2 they are used as a heuristic to continue the ongoing analysis process. As Attride-Stirling (2001) suggests: “thematic analysis can be usefully aided by and presented as *thematic networks*; web-like illustrations (*networks*) that summarise the main *themes* constituting a piece of text” (p. 386). One of the purposes of this kind of presentation and interpretation of data, particularly important for this study, is that they remove any notion of hierarchy, giving fluidity to the themes and emphasising the interconnectivity throughout the network (Attride-Stirling, 2001). In this study, the diagrammatic presentation of the thematic networks and the accompanying explanation (Section 4.9 and Figure 4.9) aided this purpose. While the thematic networks offer a way of complementing the textual accounts of the interpretative process and visually reflect the rich complexity of the experiences of leaders, they need to be understood as partial and provisional, open to a constant interplay between the actual complexity of the social context and the descriptions used to create the social context (Cilliers, 2005). Hence, the thematic networks once created, continue to be used to explore the experience of leaders. Cilliers (2001) explains this tension of representation in this way:

Since our models cannot ‘fit’ the world exactly, there are many degrees of freedom in which they move. They are, however, simultaneously constrained by the world ... [but] the notion of constraint is not a negative one. It is not something, which merely limits possibilities, constraints are also *enabling*. By eliminating certain possibilities, others are introduced. (p. 139)

This is an important consideration in understanding how the thematic analysis approach has been enacted in this study, where the education system and the *Leading for Learning Project* are conceived as open and dynamic contexts, and the experiences of leaders continually evolving and never complete. As Wicomb (2010) states, “we can never have the last word” (p.127), as our understandings need to remain open to the possibilities of new and emergent meanings.

Confronted with the limitations and possibilities of understanding and representing complex social phenomena (Kuntz, 2010), the challenge arises of how to tell the stories emerging and how to invite the reader into the meanings constructed. Janesick's (2000) suggestion of "Staying close to the data [as] the most powerful means of telling the story" (p. 389) was important advice and led me to the practice of constantly revisiting of the transcripts. Therefore, throughout the analysis process I have drawn directly from the transcripts of the interviews, using the leaders' own language for codes and code descriptions and for themes and theme descriptions, and in the following chapters, vignettes have been created that draw from the accounts of leaders. However, it is important to note that such a choice does not mean that I am attempting to offer a single and stable account of participant experiences or that a cohesive account is possible (Kuntz, 2010). Rather, it reflects a commitment to represent the everyday professional experiences of leaders, with the knowledge that such representations are always incomplete.

In summary, the thematic analysis process, undertaken within an ethnographic methodology, ensured an iterative research process that recognised partial and emergent understandings, multiple perspectives, and uncertainties in the process of analysis and interpretation (Bryant & Charmaz, 2007). These are important considerations when seeking to understand complex human and social phenomena.

4.8 Phase 1: The Presentation of Data and the Analysis Process

This section provides a detailed account of Phase 1 of the thematic analysis process, inclusive on Steps 1 – 5 as shown in Figure 4.2 above. These sections are accompanied by Appendix I (a) – (n) where further detail about the presentation of data can be found.

4.8.1 Step 1 Initial data analysis – *Gathering, reading, rereading and memoing.*

From the beginning of the analysis process I was committed to reading and rereading the interview transcripts, as well as listening to the original recordings, while continuing with the data gathering. In this first step I developed a deep familiarity with the breadth and depth of leaders' experiences (Braun & Clarke, 2006). The process of memoing began by noting in the margins the following: hunches and

ideas; summaries of what seemed to be important to the leaders; concepts, that offered an understanding of what was happening for leaders; questions reflecting my own sense making processes; and, other markers of meaning such as silence, tentative voice, intonation, and body gestures (Braun & Clarke, 2006; Creswell, 2008; Ryan & Bernard, 2003). During this memoing process I began to document my reflections, which assisted me in noticing my approach and revealing my perceptions of the experiences of leaders. An example of the memoing process, as well as an excerpt from the *Researcher's Notebook* is presented in Appendix I (a) and Appendix I (b). These processes enabled me to explore the data and discern what might be important, but still within the context of the whole body of data which was gradually being gathered (Creswell, 2008).

In this initial stage of data analysis it was important that I was able to affirm my judgement as a researcher, by responding to the texts and offering possible meanings and interpretations (Creswell, 2008). I refrained from trying to identify one stable meaning within the texts but, rather, as Davison (2002) suggests, tried to understand the texts as fluid, complex, and fragmented social interactions. This awareness is recognised as important within the epistemological stance guiding this research, as it affirms my place as researcher within the study and how collective meaning making is honed from diverse perspectives and experiences within the setting (Denzin & Lincoln, 2005). It is my view, informed by Ellis, Adams, and Bochner's (2011) exploration of ethnographic research, that such a positioning "expands and opens up a wider lens on the world" (p. 2) thereby enabling rich and deep meanings to be continually identified.

The process of gathering, reading, rereading, and memoing occurred for each of the 7 one to one interviews and 6 focus group interviews and for each of the 5 participant observation sessions. As each interview was completed the transcripts, including the memos, were returned to participants for checking. Once this had occurred I returned to the transcripts again, now with comments from participants, for further memoing.

4.8.2 Step 2 Coding the data – *Marking the text for meaning.*

The process of memoing, described above, was used to explore and record the developing analysis, leading to the identification of codes. As is characteristic of grounded theory (Charmaz, 2011) the process of developing codes, and later the themes, exemplified an inductive process, meaning I did not develop a coding framework from the literature before beginning the analysis, rather the codes were directly identified from within the data from the processes in Step 1 (Braun & Clarke, 2006). However, I was aware of how the literature had developed my sensibilities towards the research question and broadened my analytical lens, sensitising me to the subtle features of the data (Braun & Clarke, 2006). As Ryan and Bernard (2003) comment, “a researcher’s general theoretical orientations, the richness of the existing literature, and the characteristics of the phenomena being studied influence the themes researchers are likely to find” (p.781).

As the interviews and focus groups were increasingly given greater attention, annotations were building in the margins signalling my initial ideas, hunches, and analysis. Sections of the text were now marked as meaningful to the research and labelled with a code (Denzin & Lincoln, 2005; Ryan & Bernard, 2003). Coding involved identifying parts of the data (text) with a short name or phrase in an attempt to understand what was happening and to grapple with what it might mean; the process of coding began to offer an analytical frame (Charmaz, 2006). Questions that facilitated this identification and coding process were:

What is interesting here?

What is this section of the text about?

What is this an expression of or an example of?

What is the person talking about here?

Are there words within the text that could be used as a code?

(Creswell, 2008; Ryan & Bernard, 2003)

In this way the text was reshaped as I engaged with the experiences of leaders, tangibly through the text and imperceptibly through my experiences with leaders and the social context.

The following table (Table 4.4) presents an example of how the early codes were developed within Phase 1, Step 2 of the *Presentation of Data and Analysis and Interpretative Process* and how they were eventually grouped. The full presentation of all

codes can be found in Appendix I (c). When coding, I did not overtly place any restrictions on the coding process; all parts of the transcripts were coded for the 7 interviews and the 6 focus groups. The codes were applied directly to the transcripts so they could be understood within the context of the participants' experiences, and the questions that elicited the participants' responses. In this presentation of the data (Table 4.4) the statements within the table beginning, *In relation to ...* provide the context/conversations in which the codes were identified (This also assisted with the development of the refined codes). At this early stage the codes appear more as statements to ensure that the language of the participants was included as well as the context for their experience.

Table 4.4

An Example of Early Coding in Phase 1 Step 2

Context in which the codes were identified	Early Code
In relation to conversation and dialogue	Learning from/with others Creating an environment for dialogue Problem solving and openness to possibilities New ideas/understandings emerged Openness to others and ideas Keeping us focused on intent and reality Deep conversations about meaning of the work Strategies for dialogue – (use of protocols, a shared inquiry, smaller groups, theological reflections, openness to question the important issues) Freedom to have the conversations

Once all the transcripts were coded in the context of the whole interview (Braun & Clarke, 2006), the early codes were refined. This involved some regrouping of the early codes, then discerning a refined code and creating a description for the refined code. The criteria used to select the refined codes are outlined in Appendix I (d).

The process of discerning refined codes required me to return to the full transcripts of all interviews to ensure that the breadth of the refined codes captured the language and meaning of leaders. The following table (Table 4.5) presents an example of how the early codes were refined. The table shows a list of early codes, the refined code and a

description of the refined code, drawing on the experiences/expressions of leaders, including the language of leaders in brackets. The full presentation of the development of all early codes to refined codes can be found in Appendix I (e).

Table 4.5

An Example of Early Codes to Refined Codes and Refined Code Descriptors

<p>Early Codes</p> <ul style="list-style-type: none"> - <i>Learning from/with others</i> - <i>Creating an environment for dialogue</i> - <i>Problem solving and openness to possibilities</i> - <i>New ideas /understandings emerged</i> - <i>Openness to others and ideas</i> - <i>Keeping focused on intent and reality</i> - <i>Deep conversations about meaning of the work</i> - <i>Strategies for dialogue</i> - <i>Freedom to have the conversation</i> <p>Refined Code: Being in dialogue with others</p> <p>This code was used to label the text when participants used the word dialogue or conversation to refer to a way of working and learning together in one or more contexts. The code was used when participants referred to the qualities of dialogue (exploratory, open), the conditions that enabled dialogue (equity of view, mindfulness of language) and what the dialogue enabled (focus on purpose, new ideas to emerge, capacity building).</p>

The online survey responses were used at this step to confirm the refined codes. This involved an analysis of the online survey responses using the refined codes as the analytical frame and noting the language participants used to describe experiences related to the refined code. The analysis confirmed each of the refined codes. One difference noted between the interviews and the online survey was that the tone of language was stronger and more direct in the online survey when describing the way the project finished.

4.8.3 Step 3 Codes to themes – *Connecting and seeing the patterns.*

In Step 3 attention was given to identifying connections between the refined codes and seeking patterns across the whole data set (Creswell, 2008; Yin, 2009). Hand drawn maps were created to provide a visualisation of this process of connecting codes and discerning themes. This resulted in layered and detailed maps developed over time.

The use of hand drawn maps allowed me to explore relationships between the refined codes, and to identify themes across the data (Buckley & Waring, 2013). It also allowed for the complexity of what was emerging to be explored visually, enhancing the conceptualisation of this knowledge (Buckley & Waring, 2013). The process of creating hand drawn maps provided me with a way of ‘seeing’ the complexity that was emerging; the possible connections across the experiences of leaders, and the experiences that interrupted or challenged any claim to certainty in what was being identified. The map making encouraged further memoing, as a way of engaging in deeper analysis. As Buckley and Waring (2013) comment:

diagrams add a new dimension to representing the research process, and can help researchers to be more reflexive as they encourage careful thought about what is going on and make the process more transparent, reducing the potential for being reductionist. (p.151)

An example of one of the visual maps, with some examples of memoing transcribed for clarity, and a self-reflection note on the process can be found in Appendix I (f) and Appendix I (g).

Each visual map was checked against previous iterations of the maps, resulting in the simultaneous refinement of all maps and a deep familiarity with what was being identified across the data as a whole (Ryan & Bernard, 2003). This movement towards conceptualising through creating visual maps allowed me to identify how the codes connected: revealing connections, relationships, and patterns within the experiences of participants. The mapping process also ensured that the diversity of experience and perspective remained, giving attention to the disconnects, where participant experiences sat at the “edges” of emerging as patterns (Ryan & Bernard, 2003) – ideas that might otherwise gone unnoticed.

To ensure clarity of terminology, before addressing the next step, the following is offered as definitions of labels used.

Early codes – Labels applied to sections of the transcripts to capture the meaning of the text. Open questions were used to guide this process. Early codes used the language of participants.

Refined codes – Labelled groups of early codes and accompanied by a description of the refined code, capturing participant language and meaning.

Patterns – Relationships within and across the refined codes. Identified through the visual mapping process.

Themes – Identified patterned responses through an exploration of the refined codes. Themes capture something important in relation to the research question (Braun & Clarke, 2006) (This term will be further explored below).

4.8.4 Step 4 Identifying themes – *Creating thematic networks.*

The iterative emphasis within this research process meant the identification of themes, both as a conscious and unconscious activity occurred throughout Steps, 2, 3, and 4 (Ryan & Bernard, 2003). In the initial stages this occurred when I started to notice recurring patterns of meaning and issues of interest within the transcripts. However, it was in Step 4 that individual themes began to consolidate and develop a sense of coherence, and where distinctions between themes became clearly identifiable (Braun & Clarke, 2006).

Four questions assisted me in identifying themes from the processes outlined above.

What are leaders doing?

What are leaders experiencing?

How are leaders enabling capacity building? (Of self, the group, and the system)

How is leadership being enacted?

While the earlier questions (in Step 2 – Coding the data) used to identify refined codes were deliberately open and unrestricted, these questions focused attention on the purpose of the research – to understand how one education system enabled system capacity building through exploring the experiences of leaders in the context of the *Leading for Learning Project*.

These questions enabled me to identify what was important within the body of extracts associated with each refined code and where there were connections between the coded extracts. This step in the analysis process involved rereading all the collated extracts for each refined code as well as reviewing the visual maps. The four questions were consistently used to guide the process towards the development of the themes (Braun & Clarke, 2006). The “keyness” of a theme, as described by Braun and Clarke (2006) was determined by consistently applying a set of criteria throughout the process (see Appendix I (h)).

The following table (Table 4.6) presents theme 1 in full, showing the movement from the refined codes to the development of theme 1. The tables presenting the full development of the other three themes are found in Appendix I (i-k). It is important to note that the process of discerning the four themes went through a number of iterations for each of the themes. While only one table can be shown for each theme there were between four and eight different versions before the final themes and resultant thematic networks were realised and confirmed (presented at the end of Phase 1, Step 5). The table presented below represents *one* of the iterations of the development of theme 1 across the whole process of discernment. Following the table is a representation of a *simple* thematic network developed from the table. The simple thematic networks for the other three themes are included here. The final and fully developed thematic networks are presented in Step 5 Section 4.9.5 below.

The table presented below can be understood in the following way:

Moving from left to right across the table:

1. Column 1 - lists the refined codes developed in Step 2 that contributed to the development of the theme.
2. Column 2 - a selection of participants' comments from the whole corpus of data that support the development of the theme
3. Column 3 - summary statements that draw on leaders experiences as related to the theme.
4. Column 4 – the theme (at one point in time within the process, therefore not the final theme)

Theme 1: *Creating an expanded and open space for dialogue that focuses on the meaning of the work.*

Table 4.6

The Development of Theme 1

Refined Codes (Taken from Table 4.5 above)	Selected participant comments	Summary statement of leader experiences	Theme 1
<p>Being in dialogue with others</p> <p>Experiencing diversity</p> <p>A focus on purpose and the enactment of purpose</p> <p>Understanding self and others in relation to the work</p>	<p>“to get to a new place of understanding. It allows them to have new questions – to think about things in a new way”(Int 1)</p> <p>“There has been an environment of problem solving and knowledge creation that we are all committed to”(Int 3)</p> <p>“I’m mindful of the kind of language I use. I try not to assume everyone thinks the same. I’m mindful of framing things so it’s exploratory”(Int 7)</p> <p>“There was a freedom to that [conversations] without feeling right or wrong”(FG 1)</p> <p>“having people from different teams come together, they bring different eyes, you need diversity to build your capacity”(Int 7)</p> <p>“you can’t offer this to kids if you are not finding space within yourself for this”(Int 7)</p> <p>“the project asked us to explore something much deeper (beyond curriculum and learning), it is really getting to the essence of what we are on about”(Int 6)</p> <p>“It’s within the conversations, it’s the newness that grows within you”(FG 5)</p> <p>“it’s through dialogue that we get to understand the story, why things are the way they are”(Int 3)</p> <p>“there have been times when our</p>	<p>This has been an experience of exploration, problem solving and knowledge creation.</p> <p>This has been an experience of connecting diverse people and ideas</p>	<p>Creating an expanded and open space for dialogue that focuses on the meaning of the work</p>

Ways of working as a system	moral purpose has been in conflict with the organisational parameters ... but that hasn't stood in the way because one of the strengths of the dialogue, is that we keep coming back to the commitment of what we set out to do...The dialogue has enabled us to say yes, we are clear ... we've had to reorientate but it hasn't changed our intent" (Int 3)	This has been an experience of grappling with the purpose of our work in the context of challenging environments	
Leader as learner	"we looked at all the possibilities and took a positive stance ... we ensured a way forward so we could continue to learn" (Int 5)		

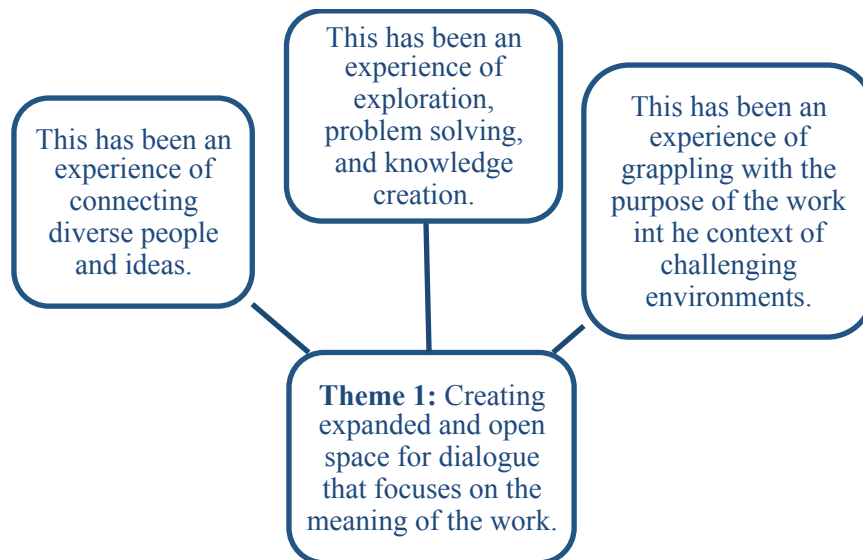


Figure 4.3. Simple thematic network 1: *Creating an expanded and open space for dialogue that focuses on the meaning of the work.*

Theme 2: *Creating expanded and connected contexts for working and learning*

The table showing the development of *Theme 2 –Creating expanded and connected contexts for working and learning* can be found in Appendix I (i)

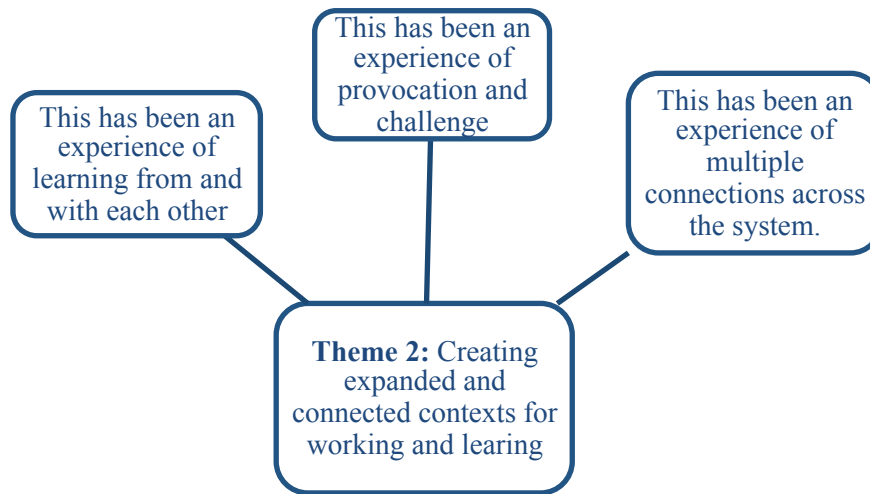


Figure 4.4 Simple thematic network 2: Creating expanded and connected contexts for working and learning.

Theme 3: *Creating and sustaining a sense of system*

The table showing the development of *Theme 3 –Creating and sustaining a sense of system* can be found in Appendix I (j).

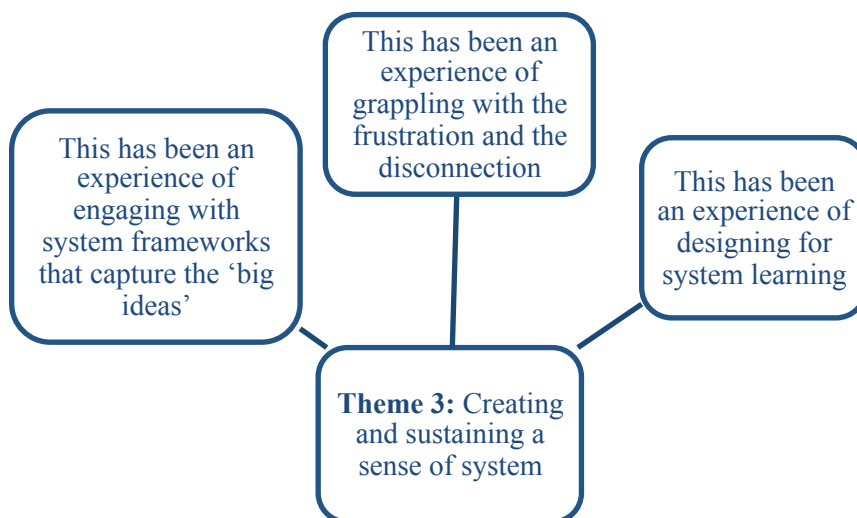


Figure 4.5 Simple thematic network 3: Creating and sustaining a sense of system.

Theme 4: –Leadership: being within and enacting open communities of learning

The table showing the development of Theme 4 –Leadership: being within and enacting open communities of learning can be found in Appendix I (k)



Figure 4.6 Simple thematic network 4: Leadership: being within and enacting open communities of learning.

During Step 4 the themes and the summary statements were continually revised as the coded data extracts were explored and the visual maps revised. In preparing for the final step within this Phase – Step 5 *Reviewing the Themes* – the tables were converted to simple visual maps, as above (Figures 4.3 – 4.6), these are the first iteration of the thematic networks. These simple thematic networks became a tool for continued interpretation (Attride-Stirling, 2001) allowing me to apply them to the entire corpus of texts.

4.8.5 Step 5 Reviewing the themes – Revisiting the experiences of participants.

Using the four simple thematic networks as a tool for further analysis and interpretation, I returned to the original full transcripts to reread them through the lens of the themes (Attride-Stirling, 2001). Rather than read the texts in a linear manner as an interview transcript, they were read with the following questions in mind:

1. Can I find an expression of these themes within the experiences of leaders?

2. What meanings do the leaders' experiences bring to an understanding of these themes?

This process resulted in a revision of all themes and associated summary statements within the simple thematic networks, as well as selecting additional supporting extracts to illuminate meanings within the theme.

This process of revisiting the participant experiences allowed me to confirm the importance of the themes in understanding the experience of leaders (Ryan & Bernard, 2003) and to refine my selection of text segments from the original transcripts as confirmation of the themes. Subsequently my understandings of the experiences of leaders in relation to the themes shifted and deepened. The following self-reflection note captures my thinking at the time.

Self Reflection note on the process
I have read all the transcripts again with the thematic networks in mind - things begin to change –I have shifted many of the extracts around.
It has been a spiraling process of working through the detail distilling and now it is like going back to the beginning again – but I have different understanding now –and I really need to come back to the whole having pulled everything a part and to listen again to the experiences of the leaders - and read again to confirm these themes still work as a way of understanding their experiences.
Researcher's Notebook (Nov.)

Figure 4.7 Self-reflection note 1.

The process of revisiting the experiences of leaders through rereading the transcripts was an important step within the thematic analysis process. It signaled the value I had for the continual engagement with the experiences of participants; to reiterate Janesick's (2000) advice of "Staying close to the data [as] the most powerful means of telling the story" (p. 389). The process provided an opportunity for the continual reconstruction of experiences (Denzin & Lincoln, 2005). This iterative process of developing the thematic networks is underpinned by the principle of "goodness", referred to earlier, "as a means of locating situatedness, trustworthiness and authenticity" (Tobin & Begley, 2004, p. 391) within the research process.

This final step in Phase 1 of the thematic analysis process, Step 5 Reviewing the themes –

Revisiting the experiences of participants, resulted in the following set of confirmed themes.

Theme 1: Creating diverse opportunities for dialogue that focus on the meaning of the work

Theme 2: Engaging with diversity in expanded and connected contexts for working and learning

Theme 3: Creating and sustaining a dynamic and connected sense of system

Theme 4: Reconceptualising and enacting what it means to be a leader and a learner.

These confirmed themes anchor the four thematic networks and are fully illustrated below in Figure 4.9 and in Appendix I (l-m), with each theme having three elements:

Element 1. The theme, as confirmed above.

Element 2. A summary statement, reflecting the leaders' experiences of the theme.

Element 3. The expressions leaders gave to the experiences. These expressions are closest to the textual data and are supported by extracts from the data (Attride-Stirling, 2001; Ryan & Bernard, 2003).

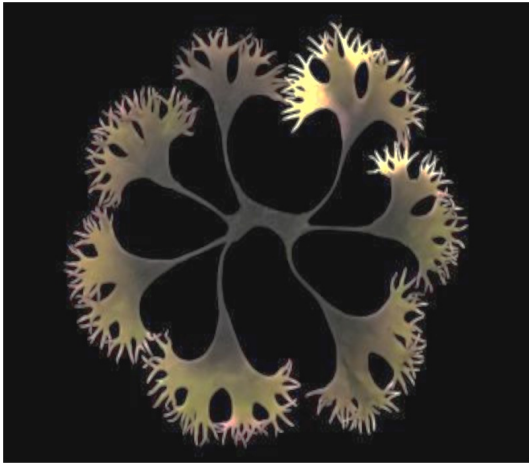
Before presenting the thematic networks an explanation is given to how they are represented and understood within this research, particularly in relation to the studies interest in complexity theory.

4.9 Thematic Networks: *As Living Systems*

One of the challenges this study has had to address is how models or frameworks are used to represent complex phenomena. As Cilliers (2001) points out, models inherently reduce complexity and leave dimensions out, and because of the dynamic interactions within complex systems, not only are dimensions left out, but the interactions are distorted (Cilliers, 2001). Therefore any use of models, like thematic networks, need to be understood as partial and provisional, open to a constant interplay between the actual complexity of the social context and the descriptions of the social context (Cilliers, 2001, 2005). An understanding of these limitations, however, provides the impetus and freedom to continually transform these thematic networks and to understand them as emerging in response to this research process. Therefore, while the four thematic networks have been presented as confirmed at the

end of Phase 1, they continued to be developed and re-understood within Phase 2 of the thematic analysis process. This will be the focus of Chapter 5 where the thematic networks are used as a heuristic tool within the analysis and interpretative process.

In Chapter 3 it was suggested that drawings are used within this thesis, not simply as an addition to the text, but integral to the process of understanding textual accounts and contributing to renewed ways of conceptualising (Radnofsky, 1996). This suggestion is again applied to the following drawings of the thematic networks. Attride-Stirling (2001) describe thematic networks as “web-like illustrations”. This use of metaphorical language brings attention to the connectedness within and between the thematic networks and to the fluid, rather than fixed meanings of the themes. Such a description also signals a resistance to any order of importance or linearly reading. Rather such language encourages, as Deleuze and Guattari’s (1987) description of rhizomes suggests, “directions in motion. It has neither beginning nor end, but always a middle form which it grows and overflows, unlike a structure, which is defined by a set of points and positions” (p. 21). Given this description and understanding of thematic networks in this research, the drawings of thematic networks are used to facilitate a connected, open, incomplete, yet emergent representation of the experiences of leaders. They also encourage multiple pathways, not to any particular end point, but rather to one continuous experience of understanding. In an attempt to achieve this, the thematic networks have been modeled on a living system - Irish moss (*Chondrus crispus*) - captured in the photograph below (Figure 4.8), as a representation of a natural system and described as “a direct snapshot of nature’s complex beauty” (Science Photo Library, 2013).



The morphology of Irish Moss is varied and its color changeable depending on the surrounding environment. Living in the intertidal and sub tidal zones it experiences challenging environmental conditions that influence its appearance and structure (Science Photo Library, 2013).

Figure 4.8 Irish moss (*Chondrus crispus*, Image by Andrea Ottesen).

As a living system it is dynamic, responding to its environment, as well as sustaining its capacity for life. In using this image as inspiration, the thematic networks (an example of one is illustrated below, Figures 4.9) have been designed in an attempt to capture the connected and dynamic experiences of leaders, but within the context of open boundaries and fluid spaces. Consideration has also been given to the possibility of other experiences, as fractal like fronds grow outwards and take on new forms. While the orientation is to the centre, there is no order to be followed, but rather multiple dimensions that simultaneously seek to be understood as integral to the whole “living system”. The image of the plant has a general form that enables it to be recognised as ‘Irish Moss’ with its particular function and characteristics, but there is also diversity in the fronds of the plant as a result of the influence of the environment. The thematic networks have also been designed with a general form to orientate the reader to the experiences of leaders, but each thematic network is different due to the contextual influences of diversity in the expression of these experiences. In these representations there is a move away from a standardised and predictable representation of thematic networks, to one that expresses diversity and fluidity of form. The diversity within the thematic networks – reflected in spatial arrangement, colour, and shape – stimulates the eyes search for different ways of understanding across the whole rather than the linear and directional organisation of a standardised chart or table (Radnofsky, 1996). In using a “living system” as inspiration for the representation of thematic networks, the model attempts to bring attention to such ideas as connectedness, openness, possibility, and diversity that may go unrecognised

when more standardised and determined models are utilised (Radnofsky, 1996). The four thematic networks, modeled on the living system, Irish moss (*Chondrus crispus*) are now presented. Each thematic network is anchored by the confirmed theme outlined at the end of Phase 1, Section 4.8.5. Thematic network 1 is presented below, with thematic network 2, 3 and 4 presented in Appendix 1 (l-n).

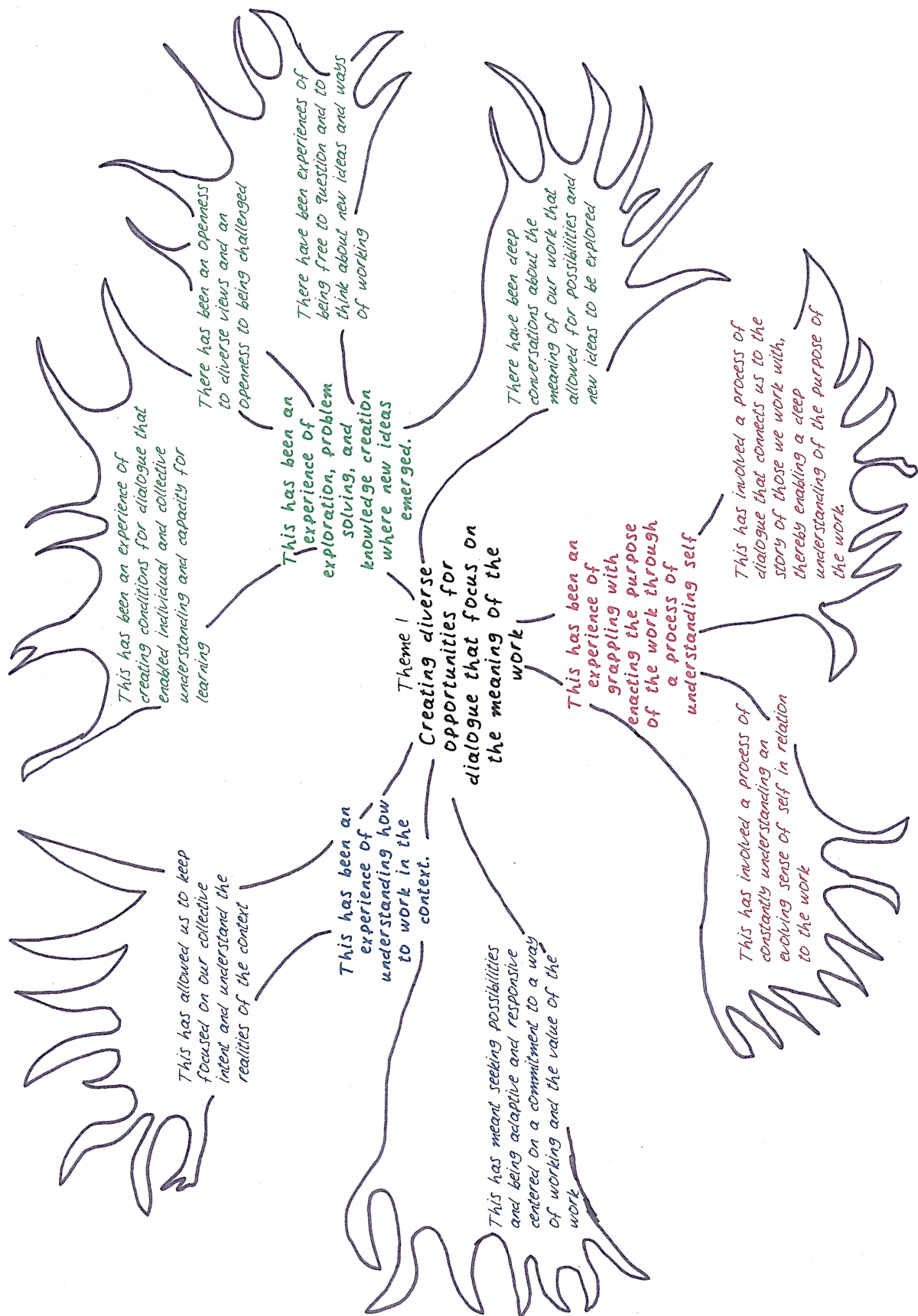


Figure 4.9. Thematic Network 1: Creating diverse opportunities for dialogue that focus on the meaning of the work

Before moving to Chapter 5 where Phase 2 of the thematic analysis process will be detailed, the final sections of this chapter describe how the trustworthiness of the research was established and how the ethical considerations for this research were addressed.

4.10 Trustworthiness of the Research

Within the paradigm of qualitative research credibility, quality, and robustness is determined by establishing the trustworthiness of the research. It is the way qualitative research understands rigor and demonstrates integrity and competence (Creswell, 2008; Guba & Lincoln, 2005). Tobin and Begley (2004) in their discussions around this topic, suggest the application of “goodness” is integral to the research process: “the concept of goodness [is] a means of locating situatedness, trustworthiness and authenticity” (p. 391). In this study the principle of goodness informs the understanding of trustworthiness used to guide the overall research process.

The five strategies integral to achieving trustworthiness within this research will now be outlined (except for researcher self-reflection, as this has been discussed in Section 4.4 above).

Trustworthiness was established by inviting leaders to confirm the interpretations emerging after the interviews and participant observations (Creswell & Miller, 2000). Leaders were asked whether the transcripts and the initial descriptions offered by me were complete and realistic, and whether the interpretations appropriate (Creswell, 2008). Participant checking also provided an opportunity for me to clarify meanings with leaders and to notice any biases that were emerging (Creswell, 2008).

The process of triangulation within the research process established trustworthiness, as it brought multiple perceptions and a critical frame to the data analysis and interpretative processes (Golafshani, 2003), thereby creating a robust and dynamic understanding of the experience of leaders (Denzin & Lincoln, 2005). Triangulation occurred in two ways; first, across the sample of participants within the one research method (e.g. the sample of participants being interviewed) and second, across the different methods within the study (e.g. data from interview transcripts and

participant observation field notes). While the process of triangulation revealed convergence, attention was also given to non-convergence, where the multiple views of leaders lead to themes being created that expressed a diversity of experience (Creswell & Miller, 2000).

Trustworthiness is also established by providing clarity about the research paradigm and research process adopted for the study. Particular attention has been given to my stance as researcher, providing a framework by which to critique the way I constructed meaning about the experiences of leaders (Heron & Reason, 1997). As Guillemin and Gillam (2004) comment, in this way my choices and underlying values as researcher are revealed, acknowledging the potential to influence or bias the data generated through the research methods. This transparency is intended to demonstrate how the research process leads to the conclusions of the study (Silverman & Marvasti, 2008), thereby providing a framework for discussions about the credibility of the research (Guba & Lincoln, 2005).

Finally, a 'critical friend' review was included as a further strategy to enhance the trustworthiness of the research (Creswell & Miller, 2000). A critical review process was undertaken on three occasions; once at the research design stage and twice during the analysis and interpretation phases. The intention of the review process was to challenge my assumptions, pose questions, and open up alternative ways of understanding the emerging themes (Creswell, 2008). Critical review enhances the credibility of the research, and along with the other strategies described, establishes the trustworthiness of the study.

4.11 Ethical Considerations

An ethnographic approach is about understanding the particularities and day-to-day activities of social situations, with an interest in individual views and meanings that may not find expression in the public domain. This research is interested in the work of leaders and, while this forms the public construction of their identity, their work is not usually scrutinised with such intent. Given this there were important ethical considerations to ensure the research was conducted in a manner that did not harm leaders.

Prior to commencing the study approval was sought from the Australian Catholic University Research Ethics Committee (Appendix J) and the Catholic Education Office Melbourne (Appendix K). The research was conducted in accordance with their ethical guidelines ensuring appropriate structures and processes were in place to protect participants and facilitate the process of informed consent. Leaders were fully informed about the purpose of the research, the research question, each of the data gathering methods, and the right to withdraw from the research at any stage. Information was provided via written communication and also reiterated verbally each time leaders engaged in a data gathering method. Leaders were informed that participant anonymity would be assured in any documentation and final reports, with identities being masked (Etherington, 2007).

Ethical research extends beyond these important ethical guidelines (de Laine, 2000) by being continually aware of potential ethical dilemmas that may arise (Etherington, 2007). As de Laine (2000) comments, “Each step in fieldwork is affected by the development of interpersonal contingencies in the setting. Being in the [participant’s] world means being surrounded by the real life contingencies, as an enduring problematic of fieldwork” (p. 11). A commitment to reflexive practice throughout all stages of the research gave attention to the research process as a whole, bringing a critical scrutiny to the research context, the researcher, and the researcher participant relations (Guillemin & Gillam, 2004). The use of reflexive practices enabled me to notice, what Guillemin and Gillam (2004) call “ethical moments” as they arose in the day-to-day of the research practice and to discern how to respond to such issues, and engage participants in dialogue around issues as they emerged

Consideration was also given to how power may be conceived within this research, particularly given my researcher as participant stance. While I was familiar with the setting and had established relationships with leaders in the project, I was aware of the possibility of how leaders might attach power or educational status to the role of researcher. Given this possibility I was mindful of enacting relationships of equal power, this was evidenced in the following ways: engagement of leaders in the co-construction of the analysis and interpretation; an open interview structure to encourage leaders to voice their experiences and issues; and, the use of reflexive

practices to bring attention to day-to-day ethical issues that might arise. However, given the complexity of relationships within and beyond the project setting (Karnieli-Miller, Strier, & Pessach, 2009), ethical issues related to perceived power relations needed to be constantly addressed (Harrison et al., 2001). Central to developing an ethical approach was transparency of the research process and my stance as researcher, where the development of respectful relationships, as well as a willingness to reveal any power imbalances, were considered important (Karnieli-Miller et al., 2009).

4.12 Conclusion

The purpose of this research is to understand how one education system enabled system capacity building through exploring the experiences of leaders in the context of the *Leading for Learning Project*. As such the following research question guides the study:

How do leaders in an education system develop system capacity to enable sustained engagement with the moral purpose?

This chapter provided a detailed description and justification of the research design guided by a relativist ontology and subjective epistemology, and how the particular interests and challenges of complexity theory are addressed. This philosophical orientation brought attention to the complex and multiple interactions within and beyond the project setting and how subjective meanings emerged through these dynamic interactions. The ethnographic methodology, and my stance as participant researcher, enabled me to focus on these dynamic interactions and experiences of leaders within such contexts, enabling me to develop rich and detailed interpretations of the experiences that were constantly open to transformation.

Detailed attention was given to the thematic analysis process, in particular Phase 1 of the process - *The Presentation of data, initial analysis and interpretation*. While the steps were outlined in a linear form, the process in practice is iterative and emergent, allowing me, as researcher, to develop familiarity with the breadth and depth of the experiences of leaders, as well as bringing into focus the complexity, contingency, and vulnerability of the multiple and connected stories of leaders. The thematic networks therefore are a cumulative response to a layered, fluid, and interactive

process influenced by the multiple stories emerging through the exploration of the data.

Phase 1 concluded with four confirmed thematic networks that will now be taken into the next Phase 2: *An Exploration of the thematic networks and their meanings*, the focus of Chapter 5. The four themes anchoring the thematic networks are:

Theme 1: Creating diverse opportunities for dialogue that focus on the meaning of the work.

Theme 2: Engaging with diversity in expanded and connected contexts for working and learning.

Theme 3: Creating and sustaining a dynamic and connected sense of system.

Theme 4: Reconceptualising and enacting what it means to be a leader and a learner.

The design of the thematic networks is modelled on a living system, as a way of communicating the open, connected, and fluid meanings of the themes, as well as drawing attention to the diversity of leader experience and expression within a human social system, that is, a living system.

Chapter 5

Thematic Analysis: Exploration of the Thematic Networks and their Meanings

The purpose of this chapter is to provide a detailed account of Phase 2 of the thematic analysis process– *Exploration of the Thematic Networks and their Meanings*. A chapter has been devoted to this process to allow for the continued intense and intricate analysis and interpretation of the data, which has allowed me to engage with the complexity of human social systems. This process has centred my attention on the interactions between leaders and an understanding of the system as constituted of these dynamic interactions or, as Preiser and Cilliers (2010) suggest, an analysis of the interactions “through which the system comes into being” (p. 267). The intention of such an emergent research process is to bring into focus the diversity, particularity, and connectedness of the experience of leaders in the *Leading for Learning Project* (Haggis, 2008).

At the conclusion of Phase 1 the following four themes were identified, with each theme developed into a thematic network (Chapter 4, Figure, 4.9 and Appendix I (I-n):

Theme 1: Creating diverse opportunities for dialogue that focus on the meaning of the work.

Theme 2: Engaging with diversity in expanded and connected contexts for working and learning.

Theme 3: Creating and sustaining a dynamic and connected sense of system.

Theme 4: Reconceptualising and enacting what it means to be a leader and a learner.

The development of each theme involved the application of criteria, strictly and consistently applied, for the selection of codes, refined codes, and themes. This was outlined in the previous chapter. The themes, therefore, capture not only the patterned responses from across the corpus of data, but are also inclusive of the diversity of experience. Therefore, in this chapter there is no attempt to indicate the prevalence of the different experiences related to each theme as the theme itself, and the diverse expressions and experiences associated with this theme, have already been justified as important. This points to one of the challenges of research within the field of complexity, highlighted in

the previous chapter that, while the intention of the interpretative process is to identify patterns (Agar, 2006), the process also needs to explore difference and particularity (Haggis, 2008). This study engages in an interpretative process that attempts to explore this challenge by bringing attention to the patterned responses but also to the unique and contextualised experiences of leaders.

Given the iterative and layered approach to the thematic analysis process, there are multiple threads of inquiry being undertaken in each thematic network, as well as across thematic networks. These threads of inquiry are constantly influenced by the ongoing analysis and interpretation as the research progresses towards its key findings and conclusions. The following explanation of inquiry, from one of the leaders in the project, is apt for understanding this iterative process.



'I've got this spiral...it's this notion of drilling down deep into what people really believe and what they bring to leadership...it's this notion of spiraling up and spiraling down.'



There is also this other spiral, where you go through this inquiry, posing questions, and constantly coming back to think...so spiraling down and coming back up and that sort of keeps propelling people forward (Int 7, p.15).

One of the challenges of this study is how to represent such an iterative and emergent research process that is transparent and offers the greatest possibility for understanding, but without yielding to a procedural and linear representation that inherently masks the complexity of complex systems. Phase 2 of the thematic analysis process has attempted to address this challenge by using the thematic networks as a heuristic tool for describing

and exploring the experiences of leaders, leading to a further level of analysis and meaning (Attride-Stirling, 2001). In doing so the experiences of leaders are continually reinterpreted and more deeply understood in response to the emergent research process.

The four thematic networks provide the structure for this chapter. Each section begins with a composite vignette, thereby anchoring the thematic network strongly in the experience of leaders. Collectively the vignettes give a sense of the complexity of the leaders' experiences and are used to complement the interpretative texts that follow, thereby linking the vignette to the broader corpus of data (Jarzabkowski, Bednarek, & K Lê, 2014). They have been constructed after the analysis and interpretative process with the intention of illustrating the patterned experiences of leaders, but with careful attention given to the unique and nuanced expressions of these experiences (Jacobsen, 2013). As an introduction to the analysis and interpretation of each of the thematic network they are able to highlight particular concepts in the theme by bringing them to life in the experiences of leaders.

Not all thematic networks have been presented in full, the additional sections can be found in Appendix L and M. A set of interim findings has been identified for each thematic network and they are presented at the end of the analysis and interpretation of the thematic networks. The chapter concludes with four key findings synthesised from the interim findings across all thematic networks. These four key findings are taken into the discussion chapter of this thesis.

Throughout this chapter pseudonyms are used to protect the identity of interviewees. At times the general term *leader* is used, with the interview excerpt identified by using the interview (Int) or focus group (FG) number. Any identifying features of schools are masked, and leaders are referred to as school leaders (inclusive of principals, teacher leaders, and classroom teachers). The general term, education office, is used to mask particular education office locations, with leaders in these settings referred to as education office leaders. The general term project team is used, rather than specific teams. Direct quotes from interviews are presented in italics, with minor changes made to grammar to create a flow in the written text.

5.1 Thematic Network 1 – Creating diverse opportunities for dialogue that focus on the meaning of the work

The first thematic network explores how diverse opportunities for dialogue that focus on the meaning of leaders work, enabled learning: leaders own learning; the learning of each other; and, how this might be conceived as system capacity building.



Figure 5.1. Thematic network 1: Creating diverse opportunities for dialogue that focus on the meaning of their work (for a full page representation of thematic network 1, see Chapter 4, Figure 4.9).

The following explanation is a reminder of how this thematic network was identified in Phase 1 of the thematic analysis process. This example of the process is applicable for all themes, but will only be illustrated for thematic network 1.

In Phase 1 the initial analysis of interview transcripts identified that the opportunities for leaders in the project to talk about their work was important. Throughout the interviews leaders used the word ‘*conversation*’ and ‘*dialogue*’ to describe the way they engaged with others within and beyond their immediate setting. The diversity of ideas and experiences within these settings enhanced the dialogue, thereby offering new meanings and understandings about their work. The decision to include this particular language of leaders was made early in Phase 1 of the analysis process as evidenced in the selection of

the refined codes and, demonstrated in the following example taken from Table 4.5 in Chapter 4.

Early Codes

- *Learning from/with others*
- *Creating an environment for dialogue*
- *Problem solving and openness to possibilities*
- *New ideas /understandings emerged*
- *Openness to others and ideas*
- *Keeping focused on intent and reality*
- *Deep conversations about meaning of the work*
- *Strategies for dialogue*
- Freedom to have the conversation

Refined Code: Being in dialogue with others

This code was used to label the text when participants used the word dialogue or conversation to refer to a way of working and learning together in one or more contexts. The code was used when participants referred to the qualities of dialogue (exploratory, open), the conditions that enabled dialogue (equity of view, mindfulness of language) and what the dialogue enabled (focus on purpose, new ideas to emerge, capacity building).

The following vignette is offered as a way of anchoring this thematic network in the experience of leaders and has been developed from the focus group and one to one interviews.

It's in the Conversations

'It's in the conversations' says Mary; 'it's the opportunity to build something new in you. I think it's the reflection ... and the discussion...I think that is really building capacity'. These conversations were 'really deep conversations', 'rigorous conversations', 'respectful conversations' and they were 'conversations through questioning'. As Steven says, 'it's a dialogue, through a commitment to moral purpose, where we have a shared commitment to the way we believe the system can work, it's framed around trust. ...and around dialogue'. The dialogue was more than 'just talk about the work', as you could hear the way leaders were grappling with describing their experiences; 'it's been an exploration ...it's an environment of problem solving

*and knowledge creation... where it was okay to say I don't know' and, as Steven sums it up, 'the reason the dialogue has been so important, is it's been framed with a real openness to each other's views. A real openness to explore and push'. You could feel that the dialogue wasn't about agreement or consensus, but rather disruption. Liz was clear about why she needed to be in dialogue with others: 'I need people...to start disrupting what I think. People, if they are open to it, actually push each other around and push peoples' thinking.' You could sense that the disruptive nature of the dialogue was somewhat unsettling, but also necessary. 'I suppose it is about seeing the possibilities' said Tanya, '...to really explore what it means to be a Catholic school in a contemporary setting and to enact that. So not just pay lip service to it.... We explored ideas it wasn't just jargon anymore. We were actually trying to bring meaning to our work.' Graeme was also open to what the dialogue offered, he felt, 'there was a freedom without feeling like there was a right or wrong...I had a sense of anything is possible. However, with the freedom and possibility, came risk and uncertainty. Margaret said she felt scared because she didn't know if this was the right path to be exploring and even doubted herself 'Do I really sound like I know what I'm talking about? Listening to leaders, you came to understand how the dialogue created a space for leaders to explore the possibility of their work, where they could step away from being certain of the 'right way' and fully engage in a process of understanding self and the moral purpose of the work. As Chris reflects: *The shift has been in me – in what I know, who I am and what I do. I can no longer be the same person I was before all this learning. I have changed.**

Three leadership experiences were identified in Phase 1 of the thematic analysis process as important within this thematic network (see Figure 5.1).

1. *Experiences of exploration, problem solving, and knowledge creation where new ideas emerged.*
2. *Experiences of grappling with enacting the purpose of the work through a process of understanding self.*
3. *Experiences of understanding how to work in the context.*

Experience 1. This has been an experience of exploration, problem solving, and knowledge creation where new ideas emerged.

The experiences of dialogue created an environment for learning, where leaders were able to learn with and from each other, developing a collective understanding of the moral purpose of the work. Dialogue fostered exploration and problem solving, where it was okay to say, “*I don’t know*”. Amongst the various expressions of this, Steven described the experience of dialogue in this way:

I have been able to deepen my understanding, because I’ve drawn on the experiences of being able to listen to and draw upon the learning and the prior knowledge already in the team. It’s an environment of problem solving and knowledge creation that we are all committed to.... and I have to engage otherwise I’m left behind...but it’s okay to say I don’t know...the conversations are helping me understand- that’s my capacity building. (Int 3, p.3)

Dialogue, as a capacity building process, revealed the prior knowledge already within the group, created opportunities to explore existing understandings within the group, and created an environment where questions and uncertainty were integral to the learning.

Leaders experienced dialogue as a feeling of freedom; the freedom to explore and problem solve, to question, and to think about new ideas without being locked down to a “*right way*”. A school leader in the project expressed the experience in this way:

There was a freedom to do that [to have the conversations] without feeling like, there was a right or wrong because we weren’t being told what to do... I had a sense of anything is possible and it was totally relevant. We didn’t have to make something fit us...[rather] what’s best for us, what’s best for student learning, was very freeing. (FG 1, pp. 6-7)

These experiences of dialogue created an environment where leaders in the project could determine their own responses to enabling capacity building within their context. Leaders were free to experiment, to be creative, and take time to thoughtfully explore the moral purpose of their work. Leaders were able to decide what questions were pertinent to their setting and how they might undertake an inquiry process to ensure the needs of their students were addressed.

Leaders in the project were aware of the conditions necessary for dialogue, as one leader in a school team commented:

it was a safe starting point for people, it wasn't starting way out there, it started from the known where people were comfortable and from there we were able to spread the thinking and the ideas" (FG 1, p.11).

In the following extract, Liz reflects on how she gave attention to the language used, inviting all participants into dialogue where the possibilities of the work could be explored:

I'm very mindful of the language I use. I try not to assume that everyone thinks the same. I'm very mindful of framing things so it's exploratory, the kind of questions, they need to open up possibilities.... It is about trying to create a space where people can come in to the conversation.... To build trust. To build respect. ... there's a space created where people can actually think about genuinely new things. (Int 7, p5-6)

Dialogue, as a capacity building process, was founded on trust and respect, where leaders recognised the importance of developing inclusive environments where all within the project could genuinely contribute new ideas and ways of thinking and working.

Leaders in the project positioned themselves *in* the dialogue; they were not *outside* the dialogue. At times this was uncomfortable, as it created experiences of uncertainty where leaders revealed their own capacities or questions, as Margaret said:

it felt scary...because you didn't know if you were on the right path or not. Do I really sound like I know what I'm talking about? But people felt comfortable enough to say what they wanted and that was good. It's the trust and it's the honest communication.... Let's learn this together. We don't know any more than you and we just want to hear what you think and move forward together. That was one of the real strengths of what we did. (FG 2, p.18)

Leaders demonstrated a willingness to take risks and to experience the vulnerability and uncertainty of engaging in dialogue. They stepped away from the perception of the leader being certain of the “*right path*”, to trusting that the way forward could be discerned through a collective process of learning. The experience of the collective – “*this is about everybody*” (Int, 3 p. 43) – created an environment of trust where people were comfortable to reveal their capacities and questions. This created a rich and dynamic environment for capacity building where leaders felt free to explore the possibilities of a

way forward.

Dialogue about the purpose of the work was enhanced by opportunities to engage with a diversity of ideas and experiences within the project teams. An openness to diverse perspectives and a willingness to be challenged by different ideas was important in building leaders' capacity to expand their understandings about the purpose of the work:

one of the things that has been a very important element of capacity building, is the diversity of the group. People, if they are open to it, actually push each other around and push peoples' thinking. That's been the good thing, having people from different teams come together, because they do bring different eyes to something. You need the diversity to build your capacity. (Int 7, p.18)

Such diversity of views and ideas was recognised as important if leaders were to understand the complexity of their work, and how the different perspectives influenced the meaning of their work. However, it was not just the presence of diversity that was enabling, but the willingness to be open and to be influenced by different perspectives – “to be pushed by other people's thinking” and “to be challenged. The engagement with diversity was a dynamic experience that developed leaders' capacity to participate in, and to facilitate, robust dialogue that could simultaneously hold a diversity of view, as well as identify new understandings that were emerging.

In summary, leaders in the project demonstrated a commitment to be in the dialogue with each other, where they were open to exploring ideas and problem solving around important questions of moral purpose. This commitment strengthened individual and collective capacity, as dynamic environments were created for learning that were challenging and engaged a diversity of views. In this way dialogue was understood as an important capacity building process. The opportunities for dialogue created an experience of freedom: freedom to explore diverse ideas; to question; to grapple with important issues; as well as, the freedom to be uncertain. Such experiences created dynamic and trusting environments for capacity building; enhancing the capacity for learning, and the capacity to lead learning.

The following set of interim findings (Table 5.1) has been identified from the analysis and interpretation process of thematic network 1, experience 1: *This has been an experience of exploration, problem solving, and knowledge creation where new ideas emerged.*

Table 5.1

Thematic Network 1, Experience 1- Interim Findings 1-3

Interim finding (1): Leaders participated in the processes of dialogue, creating inclusive environments for learning that were founded on trust and an openness to a diversity of perspectives.

Interim finding (2): Leaders were free to explore ideas, to question and to problem solve through dialogue, centered on enabling student learning in their own context.

Interim finding (3): Leaders discerned a way forward through a collective process of learning; a process of revealing capacities, uncertainties and questions.

Experience 2: This has been an experience of grappling with enacting the purpose of the work through a process of understanding self.

Leaders in the project identified how dialogue enabled a deep engagement with the meaning of their work, providing the time and “space” to think about ideas in different ways, to explore possibilities, and to grapple with important questions about their work. The dialogue created a commitment to enacting moral purpose and a willingness to allow new meanings to emerge:

I don't think [this new work] would be possible without giving people a lot of space to think through things, and a lot of time to talk through things in different ways.... That's been key. (Int 7, p.3)

Leaders were open to the possibilities of their work, demonstrating a desire to go beyond the “words” and understand the meaning of their work, for themselves and for those with whom they worked.

I suppose it is about seeing the possibilities... for all of us to really explore what it means to be a Catholic school in a contemporary setting and to enact that. So not just pay lip service to it.... We explored ideas it wasn't just jargon anymore. We were actually trying to bring meaning to our work. (Int 5, p.3)

Leaders also reflected on how dialogue around moral purpose prompted them to ask questions about themselves in relation to their work, raising questions about their own identity. The following is one example of how leaders gave expression to this:

if learning's around understanding who I am in the world, and making sense of that, and being able to live in that world, in a certain way, I think you have to understand who you are in that...you can't offer this to kids if you're not finding space in yourself for this...understanding their own identity. (Int 7, p.6)

This kind of dialogue engaged leaders directly and intimately with the moral purpose of the work pushing leaders beyond the usual patterns of conversations, as this leader commented:

I've had lots of conversations about curriculum and learning, so what is different? Is it because of what we are exploring? Because there are no answers? Maybe when you are talking about curriculum there's lots of research. But this project actually asked us to explore something much deeper than that. It is really getting to the essence of what we are on about isn't it? (Int 5, p.27)

The dialogue not only prompted leaders to reflect on their own identity, but also on how their own “story” might be understood in relation to an emerging understanding of the education system’s identity or “narrative”. The development of leader identity seemed to integrally connected to the identity of the education system:

you have this notion of an open narrative. The story's never been absolutely completed. It constantly – a story is constantly your story, the bigger system's story, the whole thing evolves as different things come in and interrupt it, it has to be interrupted by stuff that is quite different to you. (Int 7, p.12)

This leader reveals insight into the complexity of identity formation by describing the experience as a process of intersecting narratives: personal and system narratives constantly being shaped and reshaped through the engagement of different perspectives. Identity formation therefore, was understood and experienced as dynamic and contextual.

In summary, leaders in the project had the time and the “space” to engage with important questions about the meaning of their work. The process of being in dialogue and exploring deeply the moral purpose of the work was an experience of self-understanding that seemed to be also connected to understanding the identity of the education system. Such experiences of dialogue, as processes of capacity building were integral to leaders strengthening their own capacities and expressions of leadership.

The following set of interim findings (Table 5.2) has been identified from the analysis and interpretation process of thematic network 1, experience 2: *This has been an experience of grappling with enacting the purpose of the work through a process of understanding self.*

Table 5.2

Thematic Network 1, Experience 2- Interim Findings 4-7

Interim finding (4): Leaders created time and space to explore questions of moral purpose and to explore the possibilities of how such a purpose might be enacted.

Interim finding (5): Leaders fostered a shared commitment to grappling with the meaning of their work (moral purpose) through experiences of dialogue.

Interim finding (6): Leaders were open to continuously understanding their own identities and the identity of the education system as a process of intersecting narratives.

Interim finding (7): Leaders were open to a continuous understanding of self (identity) in relation to the moral purpose of the work.

Experience 3. This has been an experience of understanding how to work in the context.

As indicated at the beginning of the chapter, some experiences identified in the thematic networks are not presented in this chapter. The full development of this experience is outlined in Appendix L. The interim findings associated with this experience are included the overall interim findings for thematic network 1.

5.1.1 Interim findings: Thematic network 1 and their alignment with the research question.

The question guiding this research is:

How do leaders in an education system develop system capacity to enable the sustained engagement with the moral purpose?

In addressing this question the preceding discussion provides a description and exploration of the experiences of leaders in the *Leading for Learning Project*, with

particular attention given to the way these leaders created diverse opportunities for dialogue that focused on the meaning of their work.

This discussion demonstrates that, by creating these diverse opportunities for dialogue that focused on the meaning of their work, leaders developed system capacity to enable the sustained engagement with the moral purpose. They did this by:

Participating in the processes of dialogue, creating inclusive environments for learning that were founded on trust and an openness to a diversity of perspectives (Interim finding 1).

Being free to explore ideas, to question and to problem solve through dialogue, centered on enabling student learning in their own context (Interim finding 2).

Discerning a way forward through a collective process of learning; a process of revealing capacities, uncertainties, and questions (Interim finding 3)

Creating time and space to explore questions of moral purpose, and to explore the possibilities of how such a purpose might be enacted (Interim finding 4).

Fostering a shared commitment to grappling with the meaning of their work (moral purpose) through experiences of dialogue (Interim finding 5).

Being open to continuously understanding their own identities and the identity of the education system as a process of intersecting narratives (Interim finding 6).

Being open to a continuous understanding of self (identity) in relation to the moral purpose of the work (Interim finding 7).

In exploring the way leaders created diverse opportunities for dialogue that focused on the meaning of their work, a finding was also identified in relation to the how system capacity building can be diminished.

Dialogical ways of working are difficult to sustain in traditional organisational structures

(Interim finding 8).

5.2 Thematic Network 2 – Engaging with diversity in expanded and connected contexts for working and learning

“we actually all need each other, because each will offer something different” (Liz)

The second thematic network explores how engaging with diversity in expanded and connected contexts for working and learning enabled learning: leaders own learning; the learning of each other; and, how this might be conceived as system capacity building.

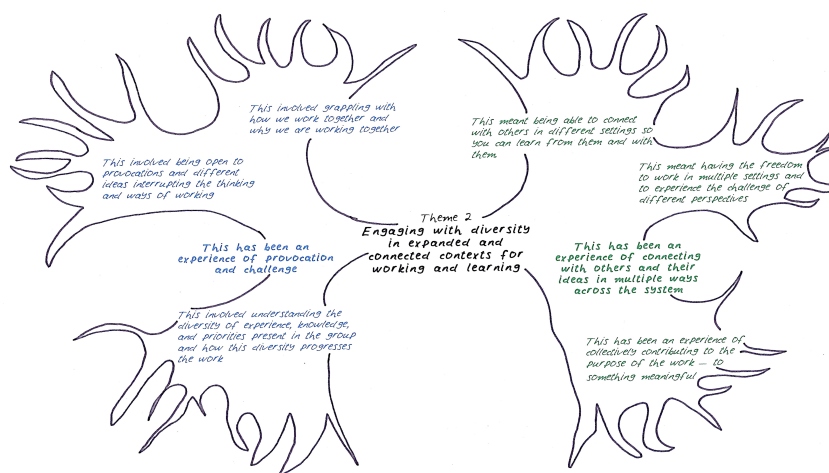


Figure 5.2. Thematic network 2: Engaging with diversity in expanded and connected contexts for working and learning (for a full page representation of thematic network 2 see Appendix I (I)).

The following vignette is offered as a way of anchoring this thematic network in the experience of leaders and has been developed from the focus group and one to one interviews.

Getting out of the Silos.

‘We certainly looked at getting out of the silos and not being so blinkered’. Tanya expressed her former frustration, and so the opportunity to work in a more connected way was greeted with enthusiasm: *‘We had never really worked on something*

together...we had always worked separately. This has been a unique opportunity for us and for schools to work on something meaningful ... I have trouble putting it in to words....it was so fantastic.’ You could feel the dynamic in the relationships shift when leaders started connecting with different people and their ideas: *‘Once we started interacting and reacting, that is when it gained momentum’* said Graeme *‘I had a sense we were learning from others, there was sharing, presenting, naming our capacity.... what we were seeing, feeling and thinking.* In *‘getting out of the silos’* some leaders got into challenging situations, as Gayle says, *‘it was good learning because of the different experiences, but some people had fairly clear ideas, and these ideas weren’t unchallengeable...we spent time nutting this out....we spent time hearing what people thought...it was critical...I had my thinking challenged’.* You could sense that for others, however, there was no time to *‘nut things out’*. It was, as Lyn says, *‘on the run, touching base...so many problems just cropped up’*. She grappled with trying to understand what was happening, for her it was the WE space, *‘It’s the WE in the project....Its the WE space..... it is trying to find a way through so that the purpose and the WE become clearer and for me that is really hard’.* Mary likened it to *‘jumping into the murk and letting clarity develop’* which she said was *‘such an uncomfortable position’.* *‘What we needed’* said Lyn, was *‘someone to come along to just open up the conversation – to release some sort of tension around the issues’.*

In listening to leaders, you got a sense that, for some, it was a question of where you had to be. It was straightforward for Steven, for him it was *‘being in there with the people, you’ve got to be in there with it, you’re not outside the learning or the dialogue’.* Similarly for Grace, *‘this is where you learn, you learn from those experiences, the conversations... are critical’.* There is so much more learning to be had when *‘you are in it, that you don’t get from just looking at the outcomes at the end’.* Liz was also adamant that the learning was mutual *‘the region, the office, schools and kids everyone, we actually all need each other – because we will offer something different’*, so her frustration was heightened when she experienced what she called *‘gatekeeping’* - *‘to have all these gatekeepers around, is a real travesty of justice, how can the narrative stay openI think we keep closing it off’.*

Two leadership experiences were identified in Phase 1 of the thematic analysis process as important within this thematic network:

1. *Experiences of connecting with others and their ideas in multiple ways across the system.*
2. *Experiences of provocation and challenge.*

The discussion that follows provides accounts from leaders that demonstrate how these experiences enabled capacity building, as well as accounts that demonstrate how capacity building was diminished.

Experience 1. This has been an experience of connecting with others and their ideas in multiple ways across the system.

Leaders in the project described the experience of connecting with others as *being with* the people they worked with. Steven described this as “*being in there with the people – you’ve got to be in there with it, you’re not outside you’re actually in it*” (Int 3, p.43). This connection was enabled through dialogue and created a commitment to learning with each other. Grace had a commitment to being with schools in their settings: *That’s where you learn from, you learn from those experiences... the conversations [have been] really critical*” (Int 1, p.2). These experiences of connecting to others - being with the people you worked with - was grounded in the belief that this was how you built your capacity to lead learning.

Tanya experienced the benefit of being with other leaders with different responsibilities and expertise, and identified this as a unique opportunity, providing her with insight into a range of new perspectives about her work. These connections enabled her to develop further her own understandings about the moral purpose of the work and to collectively contribute to something that felt meaningful:

It gave me a totally different perspective and a greater knowledge and understanding about the Catholic context in all aspects of my work. It has allowed me to lead in a much better way....This has been a unique opportunity for us, and for schools to work on something meaningful... We were both learning from each other...it was good for building capacity. (Int 6, pp.5-6)

When leaders, like Tanya, were able to engage in meaningful dialogue with others beyond their usual work contexts they expanded their understandings about their work. Leaders identified these as learning experiences, enhancing their own capacities for leading.

Liz, a leader in an education office location, recognised the benefit of being with others in the learning, however was unable to make the kinds of connections needed for progressing learning. Liz expressed her frustration at the inability to connect beyond her immediate team or work location, in particular, the inability to connect to teachers and students. She described this as “*gatekeeping*”, where the opportunities for learning were closed down. The following comments express her frustration:

For me it is too linear. It looks connected on paper, but in actual fact I don't feel connected at all to the students and teachers. If you are only talking to people in your own context, I don't see how the narrative can stay open ... I think having all these gatekeepers around the work is a real travesty of justice. ... I think we keep closing it off (Int 7 p.10 – 13) ... We actually need to be working - as the questions lead us. I don't understand this categorisation; it's not healthy. (Int 7, p.14)

While Liz understood that the questions and the learning determined the kinds of connections needed, her experience suggests that it was the existing organisational structures that determined the scope of the learning and, consequently, restricted the learning.

One of the implications of this linear model, as Liz experienced it, was the diminished diversity within the group and the limited possibilities of exploring new ideas or of being challenged and provoked in your thinking:

I need to get pushed around, you need push back. There is a different dynamic when you go out [to schools]. Different sets of questions come from principals and schools. We push people in a different direction too. I just think the push and that disruption doesn't happen enough...So this work starts to get quite stale after a while, when you're going around in circles. (Int 7, pp.16-17)

Liz expressed a need to be “*disrupted*”, to have her thinking challenged if the work was to be progressed in new ways. These experiences provide insight into the necessity for learning and capacity building to be understood as disruptive processes, if it is to progress the work of the system. However, it can be suggested that the linear structures of education system, and the associated roles within these structures, maintained order and

thus diminished the possibility of dynamic connections that bring to the fore a diversity of views.

In summary, leaders in the project understood that their collective capacity to lead learning was strengthened when they were learning in multiple and diverse contexts across the system. These experiences highlight the challenges of creating diverse and “*disruptive*” environments when there are linear organisational structures that diminish the possibilities for capacity building.

The following set of interim findings (Table 5.3) has been identified from the analysis and interpretation process of thematic network 2, experience 1: *This has been an experience of connecting with others and their ideas in multiple ways across the system.*

Table 5.3

Thematic Network 2, Experience 1 – Interim Findings 1 - 5

Interim finding (1): Leaders demonstrated a commitment to **be** in the process of learning with others across multiple dimensions of the system.

Interim finding (2): Leaders created opportunities to connect with a diversity of ideas from across the system, enabling expanded and shared understandings of moral purpose.

Interim finding (3): Leaders identified how linear organisational structures diminished the possibility for dynamic connections and for a diversity of ideas to inform the learning in the system.

Interim finding (4): Leaders identified how the questions and learning emerging in the context need to determine the kinds of connections necessary.

Interim finding (5): Leaders understood the necessity of being “*disrupted*” by a diversity of views to progress thinking and learning.

Experience 2. This has been an experience of provocation and challenge.

To understand this experience of provocation and challenge two different settings within the project are explored and contrasted. What distinguishes these two settings is not their

different locations, but the different perspectives of leaders and the different enactments of leadership within each setting.

Setting A – *understanding the perspectives of leaders and enactments of leadership.*

In the initial stages of the project Matt, a leader in this setting, decided it was important for the teams to spend time together to understand the purpose of the project within the broader context of their work. Matt explained it in this way:

In some [places] the purpose of the project was that here was another strategic support [for schools]. [For us], it was around, how can we work with schools to develop a clear understanding of learning and teaching within a Catholic school context. And then ask, so what's that going to mean for our work [here]. (Int 4, p.31)

The leaders in this setting understood the project as having a focus on collective capacity building, for both school leaders and education office leaders.

While it was a challenge to develop a sense of collective purpose across diverse teams, the experience of engaging with different experiences and views enabled learning and a broader understanding of the work to emerge.

It got us to some very good learning situations because of the different experiences and people being very comfortable to articulate their experience, knowing that this is what they brought to the table. We had a common sense of purpose, I think we all understood that it wasn't one person; it was the collective sense of this is how it looked. (Int 5, p.15)

Leaders recognised the importance of having these challenging conversations and how they might disrupt the usual ways of thinking and working. In this setting, challenge was not feared, but rather it offered an opportunity to create connectedness through an openness to hear others and learn from others. The challenge of learning was recognised as important in enabling personal capacity and growth.

some people had fairly clear ideas and those ideas were not unchallengeable ... [but] acknowledging that challenge doesn't disconnect. That it is okay. ... What connected us was our openness to hearing what people thought about our opinions and what we thought of others' opinions, in a very safe environment. I think that was pretty critical. I had my own thinking challenged. That was good

for me because that's when I think you grow. (Int 5, pp. 18- 19)

Leaders in this setting deliberately took the time to understand the purpose of the project and how they might enact a collective understanding of their work. They were willing to have conversations that would give rise to differing views, but understood that this was important in enhancing the collective capacity of the team. The leaders in this setting suggest that the ability to hold a diversity of views and remain open to listening to each other was important.

Setting B - *understanding the perspectives and enactments of leadership.*

The leaders in this setting also identified the challenge of working across teams to develop a collective understanding of the project. Unlike the previous setting, the leaders did not seem to create time to understand the purpose of the project or how they might collectively work together. Their conversations were fleeting and seemed to be more reactive to problems as they arose. As one leader commented:

you try and drive it from within and give people voice in it, ...you're doing a lot of this on the run. Sometimes touching base...even the leaders in the region touching base was problematic.... so many problems cropped up along the way. (Int 2, p.22)

Without time for conversations, leaders were uncertain about the purpose of the project and why different teams were working on a shared project. Lyn identified this as a challenge:

This is the first project where there has been a multi-disciplinary team ... it makes sense to bring Religious Education leaders and Learning and Teaching leaders together.... But it's about growing our clarity around why we're together and for what purpose. (Int 2, p.38)

Mary, a colleague of Lyn's, supported this view and explained how this uncertainty was a very uncomfortable position:

there was a sense of worthiness of purpose, but for some there needed to be the clarity of purpose from the start. The notion of developing clarity, jumping in to the murk and letting the clarity develop is such an uncomfortable position. (FG 4, p.20)

With little opportunity for collective sense making and, in turn, collective capacity

building, leaders often tried to understand what was happening in isolation, which meant the challenges became more personal:

I had to distil for myself through this, why previous projects and the way they had gone was so different [to this one].... So finding a way through...was definitely a challenge for me. I had to adjust the way I worked within it, to ensure I contributed and maintained the rigor that I would want. (Int 2, p.1)

Leaders in this setting recognised the need for challenging conversations, but they were unable to have them:

It's constraining when it's somebody's idea and it's not owned by the group and sometimes because we are nice people, we don't sort of challenge and I think that's when it becomes constraining. So again that trust and relationship, it takes time to grow and I think it's the basis for enabling the learning and the growth; so that's so pivotal really to everything we do. (Int 2, p.23)

Without the opportunity for challenge as part of the way the team worked, the environment for learning and capacity building remained closed, and issues that needed discussing remained hidden.

Lyn recalled one experience where a leader instigated the necessary challenging conversations that the team needed:

it was like a breath of fresh air ... Someone coming along and just opening up the conversation...it can release some sort of tension around the issues... they can ask the hard questions and there is no agenda... that is really useful in a group like this...it releases in some way, it releases the valve. (Int 2, pp.10-11)

This experience confirms the important role of leadership in environments where there is uncertainty and challenge. In this example the leader was willing to open up the conversation and encourage engagement in challenging discussions. However, this experience, while helpful, was from a leader outside the setting, and therefore could not remain with the team and continue to be attentive to what was happening as they continued to struggle with making sense of their experiences.

In this setting leaders struggled with how to understand diversity. Some leaders approached the experiences of diversity as something to “*find a way through*” or “*forge a way through*”, rather than something to be experienced and given time for so that new learning might emerge. The process of collective sense making was particularly

challenging in this setting. Lyn became emphatic about the challenge of how to understand the “WE space” [her original emphasis from the participant drawing]: *It’s the WE in the project... It’s the WE space. It’s trying to find a way through so that the purpose, the WE becomes clearer and that to me is really– it’s really hard (Int 2, p.35).* The experiences in Lyn’s team bring attention to how diversity is understood within settings; whether difference is understood as enabling and necessary for learning or whether it is understood as restricting progress. Lyn’s reflections suggest that diversity was understood as restricting their ability “to deliver” the project. She often wondered about how to forge a way through when individuals had strong views and different values. Lyn’s experiences suggests there was uncertainty about how to mediate diversity and enable a productive environment for capacity building:

the challenge [of different groups working together] can either be stifling and you don’t learn from it, or you can say here’s a group who thinks very differently, how am I going to forge a way through...so somewhere between the six of us, was finding a way through, what we highly valued in the project in terms of what we were going to deliver. (Int 2, p.5)

The experiences in this setting suggest that when there is range of new perspectives to consider and when there is an expectation of *delivering* a high quality project, a diversity of view can be perceived as an impediment to enabling the efficient work of leaders.

In summary, the two sets of experiences provide insight into how the perspectives of leaders, and the enactments of leadership, influence capacity building. It can be suggested that when time is given to understanding the purpose of the work, this becomes an opportunity for building the capacity of *everyone* (not just school leaders), strengthening the connection between leadership and the enactment of moral purpose. This requires leaders to encourage, and to participate in, challenging conversations that explore different perspectives about how the work might be enacted. However, this is only possible if leaders are able to create an environment of trust, where diversity of view is considered necessary for enabling capacity building of leaders. The experiences of leaders in both these settings suggest that in environments of uncertainty and challenge, leadership needs to be actively engaged in making sense of what is happening in the setting. Without these kinds of leadership experiences, uncertainty and challenge can result in leaders retreating from the possibilities that the work can offer. Whereas, when leadership is participating in ‘sense making’ activities they create opportunities for

collective understandings to emerge from robust discussions about moral purpose and ways of enacting this in multiple contexts.

The following set of interim findings (Table 5.4) has been identified from the analysis and interpretation process of thematic network 2, experience 2: *This has been an experience of provocation and challenge.*

Table 5.4

Thematic Network 2, Experience 2 – Interim Findings 6- 10

Interim finding (6): Leaders created time and space to explore questions of moral purpose and to explore the possibilities of how such a purpose might be enacted across multiple contexts in the system.

Interim finding (7): Leaders encouraged conversations that explored a diversity of view and challenged the “usual ways of working and thinking”.

Interim finding (8): Leaders understood that trust and relationships were important in uncertain and challenging environments.

Interim finding (9): Leadership needs to be attentive to what is happening for others particularly during experiences of uncertainty or confusion.

Interim finding (10): Leadership connected leaders to purpose and mediated meaning when there were increased possibilities and different views about ways of working.

5.2.1 Interim findings: Thematic network 2 and the alignment with the research question.

The question guiding this research is:

How do leaders in an education system develop system capacity to enable the sustained engagement with the moral purpose?

In addressing this question the preceding discussion provides a description and exploration of the experiences of leaders in the *Leading for Learning Project*, with particular attention given to the way these leaders engaged with diversity in expanded and connected contexts for working and learning.

This discussion demonstrates that by engaging with diversity in expanded and connected contexts for working and learning, leaders developed system capacity to enable the sustained engagement with the moral purpose. They did this by:

*Demonstrating a commitment to **be** in the process of learning with others across multiple dimensions of the system (Interim finding 1).*

Creating opportunities to connect with a diversity of ideas from across the system, enabling expanded and shared understandings of moral purpose (Interim finding 2).

Identifying how linear organisational structures diminished the possibility for dynamic connections, and for a diversity of ideas to inform the learning in the system (Interim finding 3).

Identifying how the questions and learning emerging in the context need to determine the kinds of connections necessary (Interim finding 4).

Understanding the necessity to be “disrupted” by a diversity of views to progress thinking and learning (Interim finding 5).

Creating time and space to explore questions of moral purpose and to explore the possibilities of how such a purpose might be enacted across multiple contexts in the system (Interim finding 6).

Encouraging conversations that explore a diversity of view and challenge the “usual ways of working and thinking” (Interim finding 7).

Developing trust and relationships and understanding these as important in uncertain and challenging environments (Interim finding 8).

Being attentive to what is happening for others during experiences of uncertainty or confusion (Interim finding 9).

Connecting leaders to purpose and mediating meaning when there is increased possibilities and views about ways of working (Interim finding 10).

5.3 Thematic Network 3 – Creating and sustaining a dynamic and connected sense of system

“It becomes very freeing.... here are all the possibilities. What’s your path through all this, it is much more freeing, and there is ownership of the process” (Dianne)

The third thematic network explores how creating and sustaining a dynamic and connected sense of system, enabled learning: leaders own learning; the learning of each other; and, how this might be conceived as system capacity building.

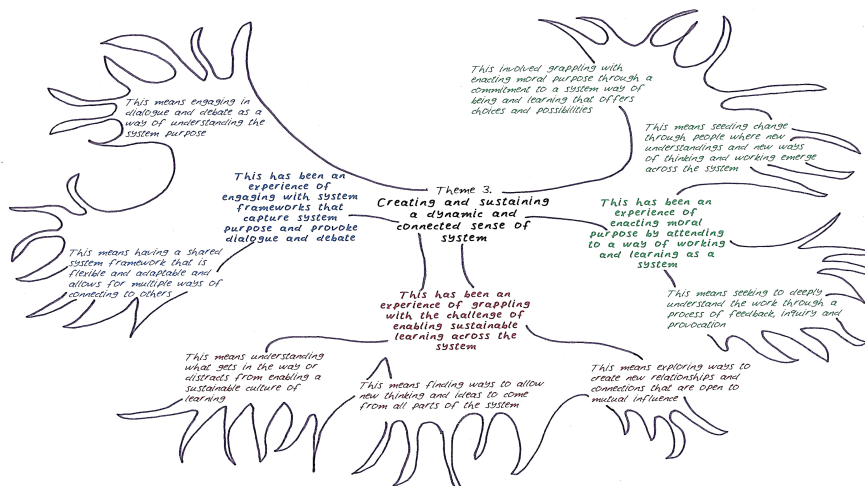


Figure 5.3. Thematic network 3: Creating and sustaining a dynamic and connected sense of system (for a full page representation of thematic network 3 see Appendix I (m)).

The following vignette is offered as a way of anchoring this thematic network in the experience of leaders and has been developed from the focus group and one to one interviews.

An Emerging Sense of System: Seeding through the project.

In listening to the experiences of leaders you are struck by their sense of commitment to moral purpose. There is a ‘like-mindedness around our sense of moral purpose and

why we are setting out to do this', says Steven, and Liz, who is grappling with how moral purpose might be enacted, says *'If the purpose of our work is about enabling students to live lives of promise, lives of service, flourishing and meaningful lives in today's changing world, then how do we work to enable this?* Such questions were explored through inquiry, where leaders really *'drilled down deep into what people believed and what they brought to the leadership and the learning'* explained Liz, *'we posed questions and constantly came back to what we thought'*. *'There was a real richness in this'*, says Cathy, *'I gained from the experiences of others, yet there was great diversity, but we were able to make a whole lot of connections'*. Dianne recognised how this differed to *'the bureaucratic way of working, where you step through things. This was such a different process, it was freeing, there were options and choices, it was like, what's your path in all this...in the end it was much more freeing'*. Graeme agreed, *'there was no one pushing us to do it a certain way, or controlling what we did'*. Steven understood this *'system way of working'* to be found *'in the person and in their interactions, through the new relationships and trust, where people begin to rethink what they do'*, he likened this to *'seeding through the project'*, where people and their interactions hold the seeds for new ways of working and for new ideas. You could sense however that these experiences brought into sharp contrast those things that *'got in the way'*, *'The hierarchical culture and the underpinning power relationships gets in the way'* says Steven, and for others there was a feeling of being *'disappointed when some leaders didn't become involved in the inquiry or the learning'*, but rather focused their leadership *'around the functionality and the organisation of the project'*. And then, as Dianne says, *'suddenly something can't happen [the project] because there is a higher priority in the education office [Change2], the project was suddenly devalued....you are being done to and the sense of being involved in the process is gone'*. Despite the decision to replace the project with something else, there was an emerging *sense* of system, *'a sense of connection, a sense of all encompassing, a sense of synergy, a sense of things coming together'*. This sense of system, as Steven explains *'was in the people and their interactions'*.

Three leadership experiences were identified in Phase 1 of the thematic analysis process as important within this thematic network:

1. *Experiences of enacting moral purpose by attending to a way of working and learning as a system.*
2. *Experiences of grappling with the challenge of enabling sustainable learning across the system.*
3. *Experiences of engaging with system frameworks that capture system purpose and provoke dialogue and debate.*

Experience 1. This has been an experience of enacting moral purpose by attending to a way of working and learning as a system.

Leaders in the project focused on the enactment of moral purpose by attending to a way of working and learning as a system. It was this connection between a stated purpose, and a way of working to enact this purpose that provided possibilities for understanding a dynamic and connected sense of system.

Steven, a leader in an education office location, expressed his commitment to the enactment of purpose in this way:

There is a like-mindedness around our sense of moral purpose for why we are setting out to do this, around social justice through education and equity of outcomes for kids, but I also think we have a shared commitment to the way that we believe the system can work, one that is framed around trust, one that is framed around dialogue, one that is framed around engagement of the agents or the actors in the change that's occurring. (Int 3, p.4)

Liz also made a strong connection between the moral purpose of the work and how leaders in the system might enact this moral purpose. In particular, she asks how a moral purpose, focused on the fullness of life for students, influences how we understand ourselves in relation to this purpose:

If the purpose of our work is about enabling students to live lives of promise, lives of service, flourishing and meaningful lives in today's changing world, then how do we work to enable this? How do we understand what is going on for us – for teachers, for leaders - in order for such an environment to be created for students to flourish? (Int 7, pp.19-20, in summary)

The way of working and enacting leadership in the project was influenced by the nature of the moral purpose - focused on the person of the learner.

In exploring questions of moral purpose, leaders engaged in a process of collaborative inquiry across multiple settings within the project. One example of this process is offered by Liz, who describes a dynamic way of working and learning as a leader that included understanding leaders' beliefs and bringing prior experiences and knowledge to the process. The following presents her narration and drawing (Figure 5.4) as evidence of Liz's experience of working and learning as a system:

I've got this spiral. I've drawn this because it's this notion of drilling down deep into what people really believe and what they bring to the leadership and the learning process with each other ... This notion of constantly drilling down and coming back up. That sort of spiraling up and spiraling down

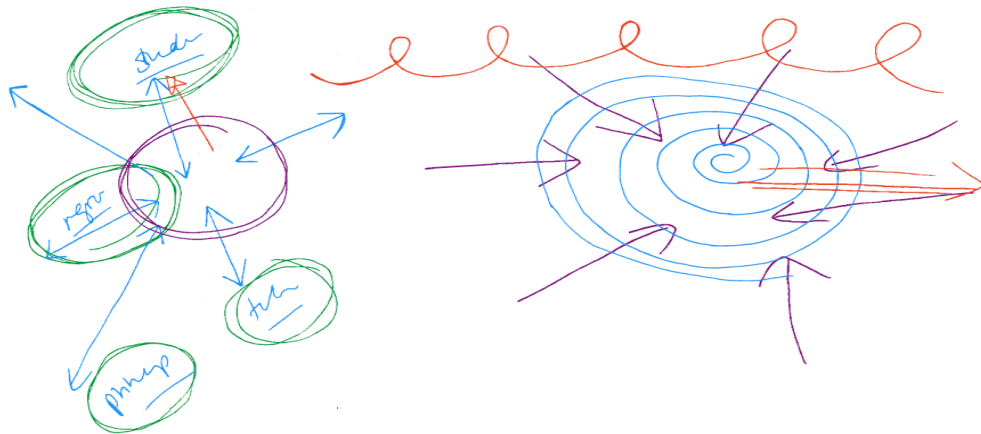


Figure 5.4. Participant drawing 1.

There is also this other spiral here, where you go through this sort of inquiry and posing questions and constantly coming back to think ... people come in and out of this at their own time and place. Spiraling down and coming back and that sort of keeps propelling people forward, sort of a movement. (Int 7, p.15)

School leaders in the project also reflected on their experiences of working and learning as a system. One school leader recalled “a sense of a real richness” in the diversity and in the connections across the whole regional cluster of schools. This leader recognised the diversity in the cluster – different questions of inquiry, different perspectives, and

different contexts- but also a connectedness, where everyone was also focused on the broader project purpose: She describes the experience in this way:

I had a great sense of gaining from those experiences, yet we weren't doing the same thing. Yet it didn't feel odd, it didn't feel like we were all sitting there, giving talks about different topics. We were able to draw from it even though we all had our own projects ... But it felt like we were all together for the one thing so that was skillful because I got that feeling without detecting how it worked. I just had a sense of a real richness... I think that was due to the broadness of the project that allows you to make connections because they weren't so targeted possibly around a particular focus – you could make a whole lot of connections. (FG 1, p.16)

This experience demonstrates how the project enabled the diversity within the cluster to be expressed, as well as fostering connections that were rich and meaningful to the individual and to the whole.

Across the project, leaders noticed a different way of working where there were more choices and a freedom to design the project in response to their own needs. Dianne, a school leader, describes this difference:

if you reflect on the system and the bureaucratic nature of the system - you go step, step through things. This was very much a different model or process so in many ways, that becomes very freeing because I think for a lot of things that we engage in, there might not be a lot of choice or options...they were things everyone had to be a part of... whereas this model was coming from here are all the possibilities. What's your path through all this and in the end this is much more freeing and there is greater ownership of the process ... it was such a move away from the manner in which we've traditionally worked as a system. (FG 1, pp.5-6)

Dianne identified some important characteristics of “a system way of working” that provided for choice and the opportunity to explore possibilities, rather than a linear and directed way of working. Other school leaders identified the importance of exploration and agency, rather than having the learning or direction of the project controlled:

there was no pushing to do it a certain way. We had guidelines and timeframes but there was an understanding that we needed to work this through...they [education office leaders] didn't need to be there controlling, getting us all on task and us

providing them with what they needed – they had their role, but they saw the need for us to get on with what we needed.’ (FG 1, p.9)

This “*system way of working*” enabled the capacity of teams to create their own way of working and learning together that was responsive to their own needs.

In creating a system way of working and learning attention was given to the interactions, relationships, and trust between people. The focus was on the people, not the project, as a basis for enacting change within the system. Steven offers this reflection:

I don’t think this project is going to revolutionise the way we work, though I do think the people working in them through these projects generate new ways of working that will reform. That’s where the reform will come: in the person and in their interactions, through a lot of modeling of new relationships and trust. ...so if we can seed through this project ... and get people rethinking about the way that we do things. I think you’ve got to trust people and you’ve got to build capacity and you’ve got to be open yourself. If we trust people and if we set up the environment then new ideas will emerge. (Int 3, pp. 20-21)

Steven’s use of the metaphor of “seeding” as a way of exploring capacity building is rich in its imagery and meaning. The metaphor brings attention to what happens *within* people and *between* people; their connections, their relationships, and expressions of trust, as foundational to capacity building. This seemed particularly important when there was uncertainty and leaders had to rely on their own collective capacities, rather than being directed in their work.

In summary, leaders in the project identified a way of working and learning that was centred on trust, dialogue, inquiry, and the agency of people in the project. This meant the project design and the enactment of leadership allowed for choice, an exploration of possibilities, and expressions of diversity, while simultaneously being anchored in moral purpose – the person of the student and their learning. This way of working and learning enhanced individual capacity building as well as the collective capacity building of groups at multiple levels within the project.

The following set of interim findings (Table 5.5) has been identified from the analysis and interpretation process of thematic network 3, experience 1: *This has been an experience of enacting moral purpose by attending to a way of working and learning as a system.*

Table 5. 5

Thematic Network 3, Experience 1 – Interim Findings 1 - 5

Interim finding (1): Leaders were committed to a way of working and leading that was directly responsive to a moral purpose focused on the person of the learner.

Interim finding (2): Leaders enabled and participated in inquiry focused ways of working and learning, creating opportunities for exploring personal beliefs and for investigating questions important to the understanding moral purpose.

Interim finding (3): Leaders designed and participated in collective learning experiences that were anchored in questions of moral purpose and strengthened by diverse expressions of how this purpose might be enacted in multiple contexts.

Interim finding (4): Leaders created environments for learning that offered genuine choice and freedom to design ways of working that enabled collective capacity building in local settings.

Interim finding (5): Leaders gave attention to people and what happens between people; the interactions, the relationships, and expressions of trust.

Experience 2. This has been an experience of grappling with the challenge of enabling sustainable learning.

This theme not only describes the experiences leaders had of a dynamic and connected way of working and learning as a system, but also the experiences of tension associated with sustaining this way of working within the existing education system culture. This section will identify those actions that diminished the potential for system capacity building.

Leaders in the project identified aspects of the existing education system culture that diminished the potential for capacity building within their own immediate setting and more broadly across the system. Some leaders described how these aspects “got in the way” of sustaining learning across the system. Leaders identified how a culture of positional power and a cause and effect model of change made it challenging to enable change through “seeding” as described in the previous section:

the existing organisational culture, the dominant culture of this place, characterised by hierarchy...and an all-knowingness, gets in the way because it is

based on power relationships. ... This need to show a direct impact on student learning, this input output, that you put something in and then automatically there is going to be an output, that has got in the way. It has got in the way of seeding through small projects. (Int 3 p14)

Another leader suggested that, although there was a shared purpose, she was less certain about a shared way of working in enabling this purpose. She wondered whether others in the system valued mutual learning, where leaders were learning from teachers and students:

I think the outcomes or goals of the project were very clear- what we wanted for students was quite solid.... The need for the people at the heart of this (students and teachers) to be prompting and provoking us... I'm not sure everyone would agree that was necessarily the way to go, or see the importance of it. (Int 7, p.20)

When relationships were based on organisational structures and positional responsibility that focused on the functions of the system, attention was shifted away from person of the learner and how the capacities of the leaders might be fully enabled to enact the purpose of the system.

One of the other challenges identified was the differing expectations leaders had about who would be learning in the project. Some leaders within the project had an expectation that all leaders would engage in collaborative capacity building processes and would be learning from each other and, in turn, “*learning for the system*”:

I thought the concept was fantastic.... I was excited because I really liked the idea of us all working together and really learning for the system. (Int 5, pp.16- 17)

However other leaders determined that their role was administrative, “*getting the structures in place to support [other teams] and allow them to do the real work*” (FG 6, p.12). This was a comfortable position for these leaders and something they easily understood:

It gave [us] a chance to discuss the philosophy on what grounds the money would be appointed to projects. It gave us a change to come to some agreement in a very logical way and to get consensus on that. (FG 6, p.6)

While these particular leaders focused on their usual tasks of administration, they were uncertain at times about their role and recognised their leadership was inadequate for the project; “*the leadership was just around functionality and organisation, it wasn't real leadership*”. They responded to the uncertainty by staying with what they knew, “*when*

you don't know something you move to ... the default position of talking about what you do know. That's what we did" (FG 6, p.15).

While these leaders suggested that capacity building was for other teams, towards the end of the interview a perspective emerged that suggested the group recognised the need to be engaged in the learning, but they found it too hard to have the necessary conversations:

we needed significant professional learning in what we were trying to achieve... We didn't have a common understanding of contemporary learning.... And I don't think we were game enough to go there....it would have been too hard for us to even get that consistency of understanding at that stage. (FG 6. Pp.13-14)

Shifting priorities within the system also 'got in the way' of sustaining a system way of working and learning. This was particularly noticeable when the timeline for the project was cut short to accommodate the Change2 initiative. A school leader described this experience of shifting priorities as "a danger", where the work and learning were devalued, distracting from the potential for system learning:

Suddenly something can't happen because of a higher priority within the [education office] ... at a school level you could feel that the project has suddenly been devalued... because something more important has come along. There is a danger ... because then projects that involve staff members and involve everybody at a school level lose their momentum and value because something else that involves only a few people takes over. So there is a danger – that distracts this kind of system learning. (FG 1, p.22)

These shifting priorities were experienced as being imposed onto schools and thus compromising the school-directed learning that was emerging: "There's a real difference between having it done to you and that sense of being involved in the whole process of the project" (FG 1, p.23). It also meant that some leaders needed to make choices about what they would give attention to in their work. This created a division between the leaders and competition amongst priorities:

we need to make choices about where we need to be. If you are told something is a priority then you need to go with that priority. That has led the team to have to make choices about where they need to be and what they need to do. (FG 5, p.21)

The decision to shift focus dismantled the learning relationships; it diminished the agency of leaders to discern their ways of working, it diminished the capacity of the system to

continue to learn from the work of leaders in the project. Rather than system coherence, leaders experienced fragmentation and diminished trust.

In summary, the leaders in the project identified how aspects of the existing organisational culture “*got in the way*” of sustaining learning across the system. They noticed the following: the perception that capacity building as necessary for some leaders, but not others, and how this dismantled the connections between teams and diminished the capacity to learn across teams; and, how shifting priorities in the system diminished agency and distracted leaders from sustaining the learning in their context. Collectively these experiences distracted from the potential for system learning and closed down the opportunities for learning and capacity building at multiple scales.

The following set of interim findings (Table 5.6) has been identified from the analysis and interpretation process of thematic network 3, experience 2: *This has been an experience of grappling with the challenge of enabling sustainable learning.*

Table 5. 6

Thematic Network 3, Experience 2 – Interim Findings 6 - 9

Interim finding (6): Relationships based on organisational structures and positional power closed down opportunities for learning focused on moral purpose.

Interim finding (7): Learning is diminished when capacity building is understood as a focus for some groups in the system and not for others.

Interim finding (8): Organisational structures and a managerial focus created “pockets of silence” closing down opportunities for learning.

Interim finding (9): Shifting system priorities distracted leaders from learning deeply from their work, and prevented this learning from influencing the system more broadly.

Experience 3. This has been an experience of engaging with system frameworks that capture purpose and provoke dialogue and debate.

As indicated at the beginning of the chapter, some experiences identified in the thematic networks are not presented in this chapter. The full development of this experience is

outlined in Appendix M. The interim findings associated with this experience are included the overall interim findings for thematic network 3.

5.3.1 Interim Findings: Thematic network 3 and their alignment with the research question.

The question guiding this research is:

How do leaders in an education system develop system capacity to enable the sustained engagement with the moral purpose?

In addressing this question the preceding discussion provides a description and exploration of the experiences of leaders in the *Leading for Learning Project*, with particular attention given to the way these leaders created and sustained a dynamic and connected sense of system.

The discussion demonstrates that by creating and sustaining a dynamic and connected sense of system leaders, developed system capacity to enable the sustained engagement with the moral purpose. They did this by:

Demonstrating a commitment to a way of working and leading directly responsive to a moral purpose focused on the person of the learner (Interim finding 1).

Enabling and participating in inquiry focused ways of working and learning, creating opportunities for exploring personal beliefs and for investigating questions important to the understanding moral purpose (Interim finding 2).

Designing and participating in collective learning experiences anchored in questions of moral purpose and strengthened by diverse expressions of how this purpose might be enacted in multiple contexts (Interim finding 3).

Creating environments for learning that offered genuine choice and the freedom to design ways of working that enabled collective capacity building in local settings (Interim finding 4).

Giving attention to people and what happens between people; the interactions, the relationships, and expressions of trust (Interim finding 5).

Interpreting the system frameworks, and bringing them into dialogue with the experiences from their day-to-day work (Interim finding 10).

In exploring the way leaders created and sustained a dynamic and connected sense of system, interim findings were also identified in relation to the way system capacity building was diminished in the context of the project. This happened when:

Relationships based on organisational structures and positional power closed down opportunities for learning focused on moral purpose (Interim finding 6).

Capacity building was understood as a focus for some groups in the system and not for others (Interim finding 7).

Organisational structures and a managerial focus created “pockets of silence”, “closing down” opportunities for learning (Interim finding 8).

Shifting system priorities distracted leaders from learning deeply from their work and prevented this learning from influencing the system more broadly (Interim finding 9).

5.4 Thematic Network 4 – Reconceptualising and enacting what it means to be a leader and a learner

“The relationship building, the understanding, the openness, has been a leadership orientation of all of us and all have been explored through the discussion...I don’t know how you get to that point without the dialogue” (Steven)

The fourth thematic network explores how reconceptualising and enacting what it means to be a leader and a learner enabled learning: leaders own learning, the learning of others, and how this might be conceived as system capacity building.

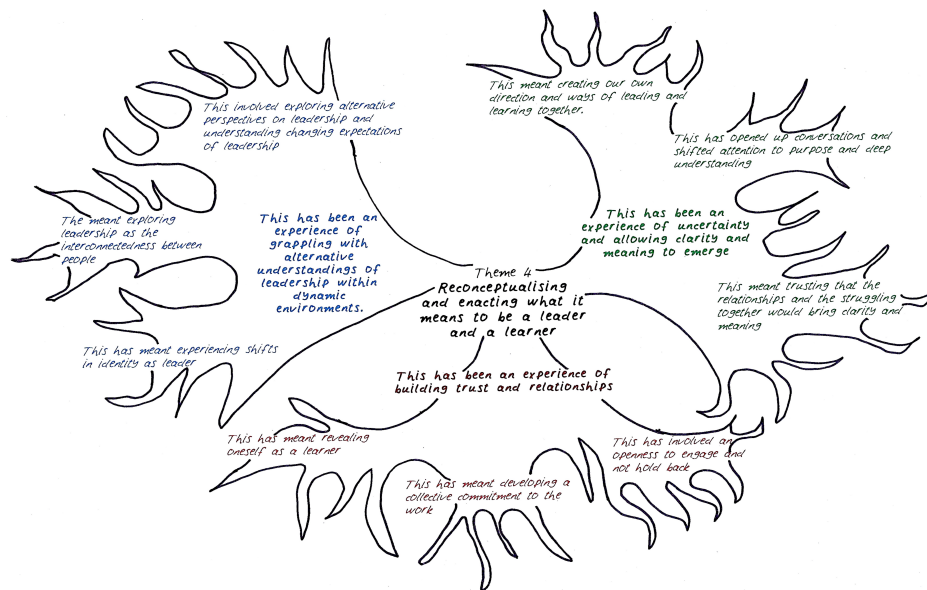


Figure 5.5. Thematic network 4: Reconceptualising what it means to be a leader and a learner (for a full page representation of thematic network 4 see Appendix I (n)).

The following vignette is offered as a way of anchoring this thematic network in the experience of leaders and has been developed from the focus group and one to one interviews.

Leading through Connections and Leading from Experiences of Uncertainty.

The initial experiences of leaders was uncertainty, *'this was the first time I had sensed this confusion'* said Graeme *'normally you go into these projects, we would be told what we were doing, but this was very open'*. *'It was quite frustrating, as we're used to ticking the job off and it's done, instead we'd come back to school'*, said Claire, *'and going, is this what we are supposed to be doing'*. *'While it was frustrating, we can now see that this was a really good way to go'*. Anne agreed, *'We stepped up and our group has lead the project in our school context and that is where we have done our best work.'* In retrospect she reflected on how *'maybe we're too used to being given the answer and led.'* Graeme was clear what this meant, *'we had to have the conversations, to openly question what we were doing, but it also meant as leader not knowing the answer'*. Liz added, it was about seeing what *'evolved or emerged.'* There was a sense that leadership *'was about being a learner and not having all the knowledge'*, and, as Liz expressed *'it's about putting your ideas out there, engaging*

the group, asking what do you think? ...and seeing where it goes'. Mary, along with others, suggests this kind of leadership is founded on 'listening to understand, as that builds trust and relationships, and that is what a leader does'. In thinking about their experiences leaders wondered how to name or describe this leadership, was it 'leadership from within' or 'democratic leadership', maybe 'shared, transparent or connected'. It was possibly Steven who was able to provide a sense of the interconnectedness of the leadership, describing it 'as rich and organic and growing, feeding and nourishing the life of the project.' he describes it as 'the space between' people. However, these enactments of leadership created some uncertainty, 'you have this expectation, leaders would know what the project is about and where is it going, that they would be trying to teach us something' says Anne, 'but I began to wonder if we were all learning at the same time'. As Robyn reflected, 'maybe you lead through the connections, clarifying and addressing what is happening, but not necessarily knowing where to go, but being clear that we do know that we want to improve learning and teaching in our Catholic School.'

Three leadership experiences were identified in Phase 1 of the thematic analysis process as important within this thematic network:

- 1. Experiences of uncertainty, and allowing clarity and meaning to emerge within the setting.*
- 2. Experiences of building trust and relationships.*
- 3. Experiences of grappling with alternative understandings of leadership within dynamic environments.*

Experience 1. This has been an experience of uncertainty and of allowing clarity and meaning to emerge within the setting.

Many leaders in the project experienced uncertainty, particularly in the initial stages. Leaders were uncertain about the direction and outcomes of the project and how they might enact leadership within the project. The uncertainty arose because the *Leading for Learning Project* did not offer the usual guidelines for working. Lyn, a leader in an education office setting, described the experience in this way:

there is no neat package. It's not a list that tells you everything to say and do. This

project has none of these guidelines. It is all about how do I interpret that? How do I make sense of that and then how do we make sense of it collectively? (Int 2, p. 36)

For some leaders, like Mary, the uncertainty about the precise outcomes of the project and how it might evolve was challenging. *'The notion of developing clarity, jumping into the murkiness and letting the clarity develop is such an uncomfortable position that it was almost a – well, a no go zone (FG 4, p.20).* However, she also recognised that capacity building emerged from the struggle with uncertainty:

It is not actually going through the motions of walking towards that clear light at the end of the tunnel. That doesn't build capacity, that just makes us all march in the same direction ... you need to struggle to build capacity. (FG, 4, p.21)

Mary identified “*being in the struggle*” as an enactment of leadership, in contrast to the habitual patterns of a linear movement towards known outcomes. Her experience reflected the tension of being in the struggle together to build capacity and trusting that the clarity would emerge through this struggle.

Liz also experienced uncertainty, describing her work as messy and complex. In these environments she recognised the importance of co-leadership as a way of creating an environment where new ideas could emerge and be noticed within the inquiry process:

To work with two other people in a democratic way, so there's no one that's in charge...it takes the pressure off... my own insights come to the fore...I can handle the messiness of the inquiry process much better when I work this way...it means that there's a space created where people can actually think about genuinely new things. (Int 7, p1-2)

Leaders in school teams also experienced uncertainty, commenting on how they were offered few guidelines, and felt left alone to work out the direction of the project. This was not an experience they were used to and it did not fit the expectations they had for such system projects. As Graeme comments:

It was the first time I sensed this confusion – normally going into these sorts of projects we would be told what we are doing. It wasn't even like we had an idea, this was very open, this sense of contemporary learning in a Catholic school. (FG 1, p.4)

The members of Graeme's team were initially frustrated because they were not able to move forward quickly, with the direction of the project changing as the conversations with each other continued. Graeme captured it in this way, *"I suppose it's that school model, the job to tick it off and it's done. It was quite frustrating that it wasn't here is the task, here's the job, let's do it – that's done"* (FG 1 p9).

Initially the uncertainty about the direction of the project resulted in school teams wondering whether they were on the *"right track"*. There was a sense amongst the school teams that someone outside their own setting would tell them what was expected. As Claire commented, *"We would come back to school and go, is this what we are supposed to be doing? Have we got it right? Are we on the right track? What should we do next?"* (FG 1, p.4). While each member of this particular school team agreed the experiences were frustrating and difficult to begin with, they recognised in retrospect that it was *"a really good way to go"*. In reflecting on their experiences they recognised *"an openness"* within the design of the project where they could develop their own way of leading the project around their particular focus. This growing awareness enabled leaders to focus attention on their own capacity building processes and to lead the learning in their context, rather than try to work out what might be expected of them by others external to their school setting. As one school leader commented, *"We stepped up and our group has led the project in our own school context...that is where we have done our best work, leading it here at school"* (FG 2, p.10.)

The experience of uncertainty shifted leaders' attention to their own context and how they might lead from within, rather than seek leadership elsewhere. The locus of capacity building shifted, enabling agency, within themselves, their school team, and the regional cluster. As Margaret, a leader in this team, commented,

I think I was coming to the understanding... maybe it's we're too used to being given answers and led. Maybe the purpose of the project is for us to explore in ourselves, on our own capacity, a regional capacity, a school capacity, what is learning and teaching in a Catholic school. (FG 2, p.15)

As the project progressed leaders from the school teams began to understand the experience of uncertainty as an opportunity to respond to their own context, creating the conditions for agency and enabling the collective leadership capacities within their setting to develop.

Many school leaders experienced a sense of freedom within this environment of uncertainty, creating an impetus for focusing on their own capacities and understandings. This required leaders to be in conversations across multiple layers of the school: “*the confusing state meant a whole lot of things were explored at the leadership level, the classroom levels, the staff level, at the community level. It certainly built our understanding*” (FG 1, p.7). The ability to hold the uncertainty and, at the same time, create a way forward, opened up conversations where possibilities for new thinking about their work emerged:

We had to have the rigorous conversations. In terms of capacity building...there is definitely the time and the place for confusion, for questions, for challenges. It is okay to openly question within teams across teams...to stop and reflect and say hang on some of this stuff doesn't suit us anymore. If we hadn't been through the process we would have continued to do what we've always done. To say, I don't think this works anymore. That is a massive step forward. (FG 1, p.7)

These experiences of uncertainty and freedom created agency and a momentum for learning and leading, shifting the locus of capacity building and enabling new insights to emerge which would shape the future direction of their work.

These experiences of uncertainty influenced how leadership was enacted, highlighting the importance of being open to not knowing where the work might lead, and to ongoing conversations as a way of understanding the work. Graeme understood his leadership in this way:

One of the things for us was not knowing the answer and making it very clear that we don't know – we've got some ideas but it was very open. We're not sure what this might look like but let's have the conversation about it. It is not going in with the end in mind. We want to promote conversations – developing people's capacity to name what they feel strongly about or name what they think. (FG 1, p.12)

Liz, a leader in an education office, also expressed the importance of being open to possibilities, to voice ideas, and to engage others in thinking about the ideas, with the possibility of extending the ideas:

As leader, putting out there what your own ideas are. Not holding back...knowing that it may not be taken up, or it will be modified or it'll evolve or emerge...as a leader you've got to be able to put your stuff out there. (Int 7, p.4)

The capacity of leaders to explore ideas openly, and to be willing to lead from a stance of uncertainty, was important if leaders were to collectively discern their way forward in complex and messy learning environments.

In summary, the experiences of the leaders within the project demonstrated how uncertain and challenging environments disrupted the usual ways of working and leading, resulting in a shift in the locus of capacity building. The locus of capacity building shifted from an external source (generally the education office or other leaders outside their immediate setting) to being multiply centred within many localised settings within the system, thereby, developing the system's capacity to focus on engagement with moral purpose, but through localised capacity building processes.

The following set of interim findings (Table 5.7) has been identified from the analysis and interpretation process of thematic network 4, experience 1: *This has been an experience of uncertainty and of allowing clarity and meaning to emerge within the setting.*

Table 5. 7

Thematic Network 4, Experience 1 – Interim Findings 1 - 6

Interim finding (1): Leaders understood the experiences of uncertainty as a catalyst for leading learning that was responsive to their local context and for developing collective leadership capacities.

Interim finding (2): Leaders disrupted expectations about the usual ways of working and leading and this acted as a provocation for change; shifting the locus of capacity building and creating agency and interdependencies in the local setting.

Interim finding (3): Leaders attended to trust and relationships, enabling the capacity for collective leadership to emerge from experiences of uncertainty or disruption.

Interim finding (4): Leaders developed co-leadership relationships, enabling new ideas to emerge and be noticed within the complexity of the work.

Interim finding (5): Leaders participated in multiple conversations within and beyond the immediate setting, exploring the possibilities for new ways of thinking and working, particularly as a way of understanding what **had** happened, what **was** happening, and what **was emerging** as a possible direction.

Interim finding (6): Leaders were open to learning with others and to experiences of “not knowing” where ideas and hunches are openly explored to discern a way forward.

Experience 2. This has been an experience of building trust and relationships.

Leaders in the project understood learning as an important enactment of leadership for enabling their own capacities as leaders and for creating open and trusting environments where there was a willingness to share uncertainties and learn from others. Grace, a leader in an education office location, referred to herself as a learner:

The most important [insight] for me is that I’m a learner – that I don’t have all the knowledge- that we need to position ourselves as being learners regardless of whether we work in the office or we have a position in the school that we’re learning together. (Int 1, p.3)

Steven expressed the importance of being in the learning with people. In the interview he was adamant that you cannot be outside the learning; for him the learning and the “not knowing” were enactments of leadership:

It is about being in there with the people- you’ve got to be in there with it, you’re not on the outside you’re actually in... You’ve got to be comfortable and confident in your own capacity to contribute and your own comfort level of not knowing. (Int 3, p. 43)

The enactment of leadership as “being with others in the learning” required leaders to be comfortable to reveal your own capacities and questions as a leader, as well as putting forward their own ideas for the group to explore and test out. Liz reflects on this:

I always had a bit of a hunch, but you don’t know... I genuinely put [these ideas] together and engaged the group, what do you think? ... I sort of thought though this will go wherever it goes.... The condition of a leader – you’ve got to put your ideas out there and it will go where it goes... However it would have been different if I had gone in there and said this is what we’re going to do. (Int 7, pp.4-

5)

The capacity of leaders to be open to exploring ideas and testing out hunches meant leaders demonstrated trust in the collective capacity of the group, and in the processes that give rise to new learning.

Leaders also specifically identified a willingness to listen and a desire to understand others as important enactments of leadership that enabled capacity building.

Building relationships and trust is about listening. That's how I understood it. By listening you also understand better. I think that is actually leadership. Listening and understanding is what a leader does (FG, 4 p.11).

These enactments of leaders; a willingness to listen and a desire to understand others, was important in creating an environment of trust founded on relationships of mutual respect.

This dynamic understanding of leadership, as learning, as listening, and as a willingness to understand others, enabled both individual capacity and the collective capacity of the group, as it gave attention to what happened between people. The following description provides insight into this dynamic:

The leadership has been exercised by the openness to discuss, the leadership has been exercised by everyone having a willingness to listen and engage. The leadership has been exercised by a desire to succeed; by an openness to learning...the leadership is the interchange that is going around. It's the space in between; it's not the individuals. It's when we are talking about the intent and what we are trying to achieve. (Int 3 p9)

The experience of this leader brings attention to what happens between people, how leadership is as a dynamic interchange between people. It is the space *in between* where the trust and relationships develop - an intense space of engaging with intent and how this intent might be understood and enacted.

In summary, leaders in the project described how trust and relationships fostered a way of working in the system. Leadership actions such as learning, listening, and seeking to understand others, embodied dispositions such as openness and respect, bringing attention to what happened between people as important in enabling the collective capacity of the group to lead. These expressions of trust were important if new ideas and ways of thinking were to emerge from the challenging experiences in the project, and if leaders

were to remain focused on what mattered (enactment of moral purpose).

The following set of interim findings (Table 5.8) has been identified from the analysis and interpretation process of thematic network 4, experience 2: *This has been an experience of building trust and relationships.*

Table 5.8

Thematic Network 4, Experience 2– Interim Findings 7 – 10

Interim finding (7): *Leaders were committed to **be** in the process of learning with others, across multiple dimensions of the system, and to learn from across the system.*

Interim finding (8): *Leaders participated in the processes of dialogue, revealing their own capacities and uncertainties*

Interim finding (9): *Leaders listened to understand others, creating an environment of mutual respect for people and their contributions*

Interim finding (10): *Leaders fostered interconnectedness between people enabling both the potential of individual and the potential of the collective to emerge and be focused on enactment of moral purpose.*

Experience 3. This has been an experience of grappling with alternative understandings of leadership within dynamic environments.

Leaders grappled with the language to describe the experiences of leadership, suggesting it was a hard question to answer. They ‘tested out’ different terms or used metaphor, with some leaders describing their experiences of leadership in the project in contrast to how leadership was understood in the broader education system.

Some leaders in the project used the words equal and equality when describing the leadership. One commented: *“It’s very equal, not controlling but allowing everyone to have an equal say in the group”* (Int 4, p.9). Another: *“very much equal... a sense of equality amongst the group... that sense of everyone was valued. We had everyone contributing to the discussions ...it was everyone working together. Rather than a hierarchy, starting at the top and working down”* (FG 1, p.10). Leadership in the project was also described by contrasting it to experiences of leadership beyond the project:

maybe that's the clash of the official sort of management and the organic knowledge creation... sometimes I find it really unnerving, because I feel ...I should be in control.... and even though I don't, it creates an internal conflict in myself. It's weak leadership if you're not telling someone. You're not leading...Whereas we would say in this project, if you're talking and you come to the table to engage in conversation, because I want to listen, I want to learn from you. Then I would say that is leadership. (Int 3, pp.36-37)

Leaders across the project recognised an alternative understanding and enactment of leadership to that of past experiences and to what they had come to expect in the education system. However these new expressions of leadership, were not always understood by others in the education system as legitimate leadership practices.

Leaders in the project also offered descriptions that characterised leadership as being enacted with others. This was reflected in phrases like, “*leadership from within*” and “*co-leadership*”. This is evidenced in this exchange between school leaders:

*Graeme: Probably leadership from within...it's not leadership from without... it's not being **the** leader, but leadership from...*

Belinda: to be part of

Diana: the concept of co-leadership

Graeme: Yeah

The experience of leadership was also described as “*democratic*” (Int 7, p.1), “*shared*”, “*transparent*” and “*connected*”, (FG 4, p. 8) where multiple leaders in the group were contributing to how the work developed, thereby enabling a collective capacity to lead in environments that were complex and challenging. “*I can handle the messiness of the inquiry when I work in this way*” (Int 7, p.2). In these settings leadership was experienced as flexible and responsive to what has happening in the project.

In describing the kind of leadership experienced or enacted in the project, one leader from an education office context used the metaphor of bone marrow to describe the leadership experience. This metaphor captured the life giving nature of leadership, an interconnected mass of fibrous intersections nourishing the work of the project:

it's like bone marrow....it's that fibrous nature where the ideas – it's within the fibrous connection where everything's being generated....there's lots of bone marrow that's rich and organic and growing. Feeding and nourishing the life of

the project, that's got nothing to do with people's position...so if we're saying that the bone marrow is the leadership, well that's happening everywhere for different purposes. But for the same intent. (Int 3 p23)

The metaphor of leadership as bone marrow evolved throughout the interview, where it was used to explore how each person brings something of himself or herself to the leadership, in support of the work, and in support of each other. The drawing, developed at this stage of the interview, supports the text.

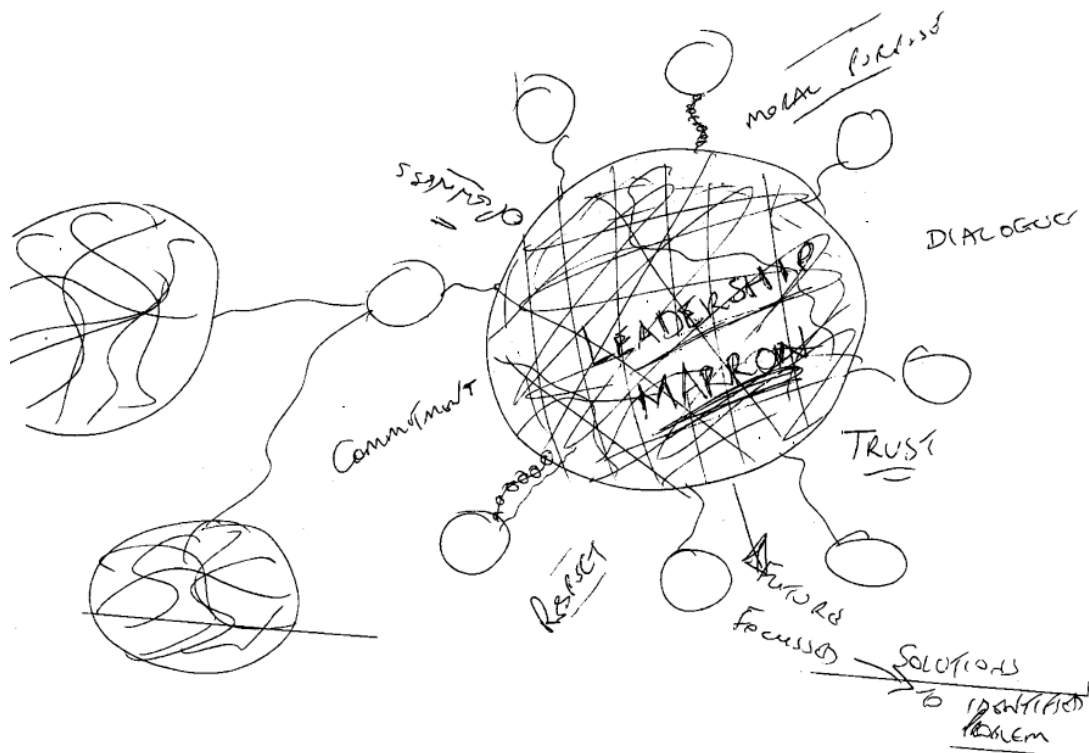


Figure 5.6. Participant generated drawing 2.

...each of us creates a thread, so the way I construe what we've been doing is that when we've sat around the table, we've brought threads to this fibrous mass and if it's this organic fibrous mass like bone – the leadership marrow- then your bone marrow is alive...everything flows out of there – each of us contributes different threads- we [draw on] that marrow. This enables me to have new thread to contribute new lifeblood for someone else- so that is leadership marrow – it's a dialogue, through commitment to the moral purpose. (Int 3 p 39)

This understanding of leadership reflects a dynamic interconnectedness between people

that is generative of capacity – individual capacity and collective capacity – it is within and between people that the capacity for new ideas, for ways of thinking and working emerge. The metaphor suggests the leadership was a life giving experience, anchored in a commitment to moral purpose

The ways of working in the project influenced how leaders understood themselves as leaders and disrupted expectations they had about leadership. Claire, a member of a school team, didn't identify herself as a school leader, and actively resisted enacting leadership:

I was probably in denial of being a leader, I can remember saying, what am I doing at this day? ...So that was interesting, my lack of seeing the big picture initially. I was very much; let the leaders get on with it... but it wasn't as simple as we'll start with these people, and go to these and go to these. (FG 1, p.10)

The ways of working in the project created an expectation that everyone had the capacity to lead and a responsibility to contribute to the leadership of the project. The assumption that leadership was enacted via a linear relationship was disrupted, rather, leadership was dynamic and interconnected where everyone was expected to 'enact their leadership' for the benefit of the whole project.

Many education office leaders actively participated in the learning with each other and with leaders in school teams. However, for some school leaders this disrupted the usual ways of working, challenging their expectations about the nature of leadership from education office leaders. The school leaders in one team commented five times during the interview on the need for more leadership: “*We're looking for people to lead and they're not there*” (FG 2, p.11). They expected that education office leaders would know the outcomes and direction of the project:

... you have that expectation, that they [education office leaders] know what this is all about and where it is going...But maybe it could be we're learning at the same time? (FG 2. P19)

While the experience was disruptive for the school leaders, it was a catalyst for changing their own leadership practices. In response to this perceived void of leadership, school leaders shifted their attention from outside their setting to taking the lead in their own context. “*Because of this [lack of leadership] we've stepped up and our group has led it*

here in our school for our context ...that is where we have done our best work, in leading it here at school (FG, 2 p.10).

In retrospect the school teams recognised how this disruption focused their leadership on the importance of making connections to purpose, and to understanding this in their own context. The assumption that some leaders would inherently know the project outcomes or the exact pathway became less probable or even desirable. A leader in a school team expressed her renewed understanding of leadership in this way:

You lead through making connections, being really clear about that, clarifying and addressing. Not necessarily knowing where to go, we may not all know, but we do know we want to improve learning and teaching in a Catholic school. That's what we want, but how we get there will vary, and that is fine. For me their leading would have been around clarity, making those connections. (FG 2, p. 21)

In summary, leaders in the project grappled with the new experiences of leadership as they made sense of their work together in dynamic environments. Leadership was experienced as a collective experience, with many people in multiple contexts contributing to the complex work of the system. In this way the collective capacity of the system was being enabled in multiple local contexts through leadership that was connecting people to each other and to the moral purpose of the work. These dynamic environments disrupted expectations of leadership, but simultaneously these experiences became the catalyst for change, developing individual and collective capacities to lead learning in changing environments.

The following set of interim findings (Table 5.9) has been identified from the analysis and interpretation process of thematic network 4, experience 3: *This has been an experience of grappling with alternative understandings of leadership within dynamic environments.*

Table 5.9

Thematic Network 4, Experience 3 – Interim Findings 11-13

Interim finding (11): Leaders enacted the value of equity, where leadership was enacted with others enabling many people to contribute to how the work progressed.

Interim finding (12): Leaders created generative environments where there was the potential for leadership to be experienced as life giving and nourishing – for the individual and the collective - and centered on a moral intent.

Interim finding (13): Leaders focused attention on the collective capacities of leadership as the way to respond the challenges of enacting moral purpose.

5.4.1 Interim findings: Thematic network 4 and their alignment with the research question.

The question guiding this research is:

How do leaders in an education system develop system capacity to enable the sustained engagement with the moral purpose?

In addressing this question the preceding discussion provides a description and exploration of the experiences of leaders in the *Leading for Learning Project*, with particular attention given to the way these leaders reconceptualised and enacted what it means to be a leader and a learner.

This discussion demonstrates that, by reconceptualising and enacting what it means to be a leader and a learner, leaders developed system capacity to enable the sustained engagement with the moral purpose. They did this by:

Understanding experiences of uncertainty as a catalyst for leading learning responsive to their local context and for developing collective leadership capacities (Interim finding 1).

Disrupting expectations about the usual ways of working and leading, which acted as a provocation for change; shifting the locus of capacity building and creating agency and interdependencies in the local setting (Interim finding 2).

Attending to trust and relationships, enabling the capacity for collective leadership to

emerge from experiences of uncertainty or disruption (Interim finding 3).

Developing co-leadership relationships, enabling new ideas to emerge and be noticed within the complexity of the work (Interim finding 4).

*Participating in multiple conversations within and beyond the immediate setting and by exploring the possibilities for new ways of thinking and working, particularly as a way of understanding what **had** happened, what **was** happening, and what **was emerging** as a possible direction (Interim finding 5).*

Being open to learning with others and to experiences of “not knowing” where ideas and hunches are openly explored to discern a way forward (Interim finding 6).

*Demonstrating a commitment to **be** in the process of learning with others across multiple dimensions of the system, and to learn from across the system (Interim finding 7).*

Participating in the processes of dialogue and revealing their own capacities and uncertainties (Interim finding 8).

Listening to understand others, creating an environment of mutual respect for people and their contributions (Interim finding 9).

Fostering interconnectedness between people enabling both the potential of individual and the potential of the collective to emerge and be focused on enactment of moral purpose (Interim finding 10).

Enacting the value of equity, where leadership is enacted with others enabling many people to contribute to how the work progresses (Interim finding 11).

Creating generative environments where there is the potential for leadership to be experienced as life giving and nourishing – for the individual and the collective - centered on a moral intent (Interim finding 12).

Focusing attention on the collective capacities of leaders, as a way of responding to the

challenges of enacting moral purpose (Interim finding 13).

The purpose of this chapter was to provide a detailed account of Phase 2 of the thematic analysis process— *Exploration of the Thematic Networks and their Meanings*. In light of this the preceding four sections (Section 5.1- 5.4) have provided a detailed description and exploration of the experiences of leaders within the context of each of the four thematic networks, anchored in the following four themes:

Theme 1: Creating diverse opportunities for dialogue that focus on the meaning of the work.

Theme 2: Engaging with diversity in expanded and connected contexts for working and learning.

Theme 3: Creating and sustaining a dynamic and connected sense of system.

Theme 4: Reconceptualising and enacting what it means to be a leader and a learner.

A set of interim findings was identified for each thematic network. The next section of this chapter presents the last step of Phase 2 of the thematic analysis: the identification of the key findings of the study.

5.5 Key Findings of the Study

The next and final step in the thematic analysis process is to consider the interim findings across these four thematic networks and determine the patterns, paradoxes, and prevalent concepts (Attride-Stirling, 2001) from the analysis that are important in the exploration of the research question guiding this study:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

This final section of the chapter will outline this last step and present the key findings of the study.

The analysis and interpretative process identified 40 interim findings across the four thematic networks; these were grouped and regrouped according to similar concepts and the elaborations of these concepts. The next step was to return to the research question and consider how the research question was addressed through the arguments grounded in these groupings (Attride-Stirling, 2001). This process led to further adjustments of the groupings, after which a statement was constructed for each group of interim findings,

thereby identifying the four key findings of the study. Each of the key findings will now be presented with a description of the key finding that establishes its relationship to the interim findings. This is followed by the list of interim findings from across the four thematic networks that contribute to this key finding. The numbers in brackets reference the thematic network and the particular interim finding within the thematic network to allow for tracking back through the analysis process to determine the source of any interim finding. For example, (3-7) means thematic network 3 and interim finding 7.

Key Finding 1: Leaders demonstrated a commitment to moral purpose, centred on the person of the learner, and an equal commitment to a way of working to enact this purpose.

The analysis of all the interim findings identified a commitment to moral purpose as important and was named eleven times across the interim findings. In particular, this key finding identifies the importance of being explicit about the focus of moral purpose, grappling with the meaning of moral purpose and exploring the possibilities of how it might be enacted across multiple settings. This included leaders being open to dialogue and engaging with a diversity of views about moral purpose. This key finding also identifies an important relationship between moral purpose and the identity formation of leaders. This analysis process also identified those actions that distracted leaders from learning deeply from their work.

Key Finding 1 was identified from the following interim findings:

- *Demonstrating a commitment to a way of working and leading directly responsive to a moral purpose focused on the person of the learner. (3-1)*
- *Being open to continuously understanding their own identities and the identity of the organisation as a process of intersecting narratives. (1-6)*
- *Fostering a shared commitment to grappling with the meaning of their work (moral purpose) through experiences of dialogue. (1-5)*
- *Enabling and participating in inquiry focused ways of working and learning, creating opportunities for exploring personal beliefs and for investigating questions important to the understanding moral purpose. (3-2)*
- *Creating time and space to explore questions of moral purpose and to explore the possibilities for how the purpose might be enacted across multiple contexts in the*

system. (1-4) (2-6)

- *Designing and participating in collective learning experience anchored in questions of moral purpose and strengthened by diverse expressions of how this purpose might be enacted in multiple contexts. (3-3)*
- *Participating in the processes of dialogue, creating inclusive environments for learning that were founded on trust and an openness to a diversity of perspectives. (1-1)*
- *Creating generative environments where there is the potential for leadership to be experienced as life giving and nourishing – for the individual and the collective- and centered on a moral intent. (4-12)*
- *Focusing attention on the collective capacities of leadership as the way to respond the challenges of enacting moral purpose. (4-13)*

**The capacity of leaders to enable system capacity focused on moral purpose was diminished when:*

- *Shifting system priorities distracted leaders from learning deeply from their work, and prevented this learning from influencing the system more broadly. (3-9)*

Key Finding 2: Leaders participated in the processes of capacity building.

The interim findings contributing to this key finding describe *ways of working* and *ways of being* in the system that contributed to capacity building. This has been identified as the way leaders participated in the processes of capacity building; that is, how they participated in the processes of learning and dialogue and how they engaged with a diversity of view. Underpinning this key finding is the importance of creating environments of trust, where leaders were able to explore possibilities and to question and reveal their uncertainties and experiences of “not knowing”. Such *ways of working and being in the system* were enabled when leadership was enacted *with* others, allowing many people to contribute to how the work progressed. The analysis of the interim findings also identified how capacity building might be diminished when this way of participating in capacity building was important for some leaders and not for others.

Key Finding 2 was identified from the following interim findings:

- *Participating in the processes of dialogue and revealing their own capacities and uncertainties. (1-1) (4-8)*

- *Demonstrating a commitment to **be** in the process of learning with others across multiple dimensions of the system, and to learn from across the system (2- 1) (4-7)*
- *Creating opportunities to connect with a diversity of ideas from across the system, enabling expanded and shared understandings of moral purpose (2-2)*
- *Participating in multiple conversations within and beyond the immediate setting, exploring the possibilities for new ways of thinking and working, particularly as a way of understanding what **had** happened, what **was** happening and what **was emerging** as a possible direction (4-5)*
- *Being open to learning with others and to experiences of “not knowing” where ideas and hunches are openly explored to discern a way forward. (4-6)*
- *Being free to explore ideas, to question, to problem solve through dialogue that centered on enabling student learning in their own context. (1-2)*
- *Creating environments for learning that offer genuine choice and the freedom to design ways of working that enable collective capacity in local settings. (3-4)*
- *Discerning a way forward through a collective process of learning; a process of revealing capacities, uncertainties and questions. (1-3)*
- *Developing co-leadership relationships, enabling new ideas to emerge and be noticed within the complexity of the work (4-4)*
- *Enacting the value of equity, where leadership is enacted with others enabling many people to contribute to how the work progresses (4-11)*

*The capacity of leaders to enable system capacity focused on moral purpose was diminished when:

- *When capacity building was understood as a focus for some groups in the system and not others (3-7)*

Key Finding 3: Leaders created spaces for capacity building that were open to possibility and centred on relationships of trust.

The interim findings, contributing to this key finding, centre on understanding what happens between people; that is the interactions, the relationships, the learning, and the development of respect. These interim findings suggest leaders focused on people and the connectedness between them as the source of emergent capacity and collective leadership. This experience of connectedness between people is understood as a space for capacity building. The interim findings identified the importance of leaders developing environments of trust, particularly when the work was challenging and uncertain. The analysis of the interim findings also identified how capacity building was diminished

when relationships were based on hierarchical organisational structures or positions of power. Such experiences within the system closed down opportunities for learning and dialogue.

Key Finding 3 was identified from the following interim findings:

- *Giving attention to people and what happens between people; the interactions, the relationships and expressions of trust. (3-5)*
- *Identifying how the questions and learning emerging in the context determined the kinds of connections necessary (2-4)*
- *Identifying how linear organisational structures diminished the possibility for dynamic connections and for a diversity of ideas to inform the learning in the system (2-3)*
- *Developing trust and relationships, and understanding these as important in uncertain and challenging environments (2-8)*
- *Attending to trust and relationships, enabling the capacity for collective leadership to emerge from experiences of uncertainty or disruption. (4-3)*
- *Listening to understand others, creating an environment of mutual respect for people and their contributions. (4-9)*
- *Fostering an interconnectedness between people enabling both the potential of individual and the potential of the collective to emerge and be focused on enactment of moral purpose (4-10)*
- *Interpreting system frameworks by bringing them into dialogues with the experiences from the day-to-day work. (3-11)*

*The capacity of leaders to enable system capacity focused on moral purpose was diminished when

- *Relationships based on organisational structures and positional power closed down opportunities for learning focused on moral purpose. (3-6)*
- *Organisational structures and a managerial focus created “pockets of silence” closing down opportunities for learning (3-8)*
- *Traditional organisational structures made dialogical ways of working difficult to sustain (1-8)*

Key Finding 4: Leaders disrupted the usual stable and predictable ways of working and leading.

The interim findings contributing to this key finding identified the way leaders disrupted the usual ways of working and leading in the system. This was demonstrated when leaders moved away from the habitual ways of engaging in professional learning projects initiated by the education system. Leaders offered choice and encouraged problem solving and the exploration of possibilities, with a focus on enabling the capacities in their local context in response to their needs. The interim findings identify that while these experiences were often disruptive and uncertain, they necessitated conversations within their own context and beyond, creating interdependencies across the system.

Key Finding 4 was identified from the following interim findings:

- *Disrupting expectations about the usual ways of working and leading and this acted as a provocation for change, shifting the locus of capacity building and creating agency and interdependencies in the local setting. (4-2)*
- *Understanding the necessity to be “disrupted” by a diversity of views to progress thinking and learning. (2-5)*
- *Understanding experiences of uncertainty as a catalyst for leading learning responsive to their local context and for developing collective leadership capacities. (4-1)*
- *Being attentive to what is happening for others during experiences of uncertainty or confusion (2-9)*
- *Connecting leaders to purpose and mediating meaning when there is increased possibilities and views about ways of working (2-10)*
- *Encouraging conversations that explore a diversity of view and challenge the “usual ways of working and thinking” (2-7)*

This final level of analysis and interpretation is the culmination of the iterative and layered thematic analysis process. As was outlined at the beginning of the chapter, there were multiple threads of inquiry undertaken in this process, *within* the thematic networks and *across* the thematic networks. The identification of four key findings is the result of “*pulling the threads of inquiry together*” and identifying the emergent patterns recognising, however, that these patterns, are patterns of interaction that emerge within the system, and dynamically constitute the system. Conversely, they are not static categories seeking to determine a generalised principle, but rather are open to multiple, and often fleeting, influences in highly contextualised contexts (Haggis, 2008). As such the detailed and intricate thematic analysis process has enabled me to engage with the

complexity of human social systems, enabling me to explore multiple and relational interactions between leaders in the context of a dynamically connected and emergent educational environment.

The next chapter will return to the research question and use the conceptual framework I developed in Chapter 3 to explore the experiences of leaders as grounded in these four key findings. This will be the focus of Chapter 6: *The Discussion – Exploring the Deep Ecology of an Education System*.

5.6 Conclusion

The purpose of this chapter was to provide a detailed account of Phase 2 of the thematic analysis process - *Exploration of the Thematic Networks and their Meanings*. This was achieved by using each of the four thematic networks as a heuristic tool to describe and explore the experiences of leaders in the *Leading for Learning Project*. This allowed for an emergent research process creating opportunities for exploring and understanding the particularity, diversity and connectedness of a broad range of leader experiences as they emerged within the setting. This detailed and intense analysis and interpretation process identified four key findings, bringing attention to what is central in relation to the research question. These four key findings will be taken into the discussion chapter of this thesis.

In summary, the analysis and interpretation in Phase 2 of the thematic analysis process supports the view that leaders in education systems develop system capacity to enable the sustained engagement with the moral purpose by:

- Demonstrating a commitment to moral purpose, centred on the person of the learner, and an equal commitment to a way of working to enact this purpose (key finding 1).
- Participating in the processes of capacity building (key finding 2).
- Creating spaces for capacity building that were open to possibility and centred on relationships of trust (key finding 3).
- Disrupting the usual stable and predictable ways of working and leading (key finding 4).

These four key findings will frame the discussion in Chapter 6.

Chapter 6

The Discussion: Exploring the Deep Ecology of an Education System

The purpose of this chapter is twofold: first, to interpret the four key findings of the study in relation to the conceptual framework I developed from a review of the literature in Chapter 3; and second, to return to the stories of leaders and provide a rich composite vignette that traces the multiple narrative threads as illuminated by the experiences of leaders.

The interpretation of the four key findings in relation to the conceptual framework offers an alternative perspective by which to understand how leaders in one education system developed system capacity to enable sustained engagement with moral purpose. By drawing on the synthesis of the literature from the field of complexity theory the framework offers a conceptualisation of education systems as complex adaptive systems and system capacity building as a complex and emergent process. This represents a shift from understanding education systems as stable, linear, and rational entities, to understanding education systems as dynamic and relational characterised by emergent ideas and behaviours. Gough (2012) recognises the necessity of such a shift and calls for the mechanistic and reductionist explanations of education systems to be abandoned, and consideration be given to how education systems might be understood as open, dynamic and nonlinear. This study, by engaging with the theoretical underpinnings of complexity theory, is able to offer new ways of understanding, conceptualising, and imagining education systems and the practices of those within them.

The purpose of the composite vignette, towards the end of the chapter, is to draw the attention of the reader back to the experiences of leaders, as articulated by leaders, and how they enabled system capacity building in complex and emergent environments. The vignettes are “patched together” with the intention of illuminating the dynamic relationships that constitute the setting (Jacobsen, 2013) as well as evoke the tension and paradox experienced by leaders across the multiple contexts of the project (Jarzabkowski et al., 2014). This approach is consistent with the view taken in this study that “Staying

close to the data [is] the most powerful means of telling the story” (Janesick, 2000, p. 389). The composite vignette follows the lengthy interpretative discussion in this chapter, thereby anchoring the composite vignette in the empirical data and demonstrating, what Tobin and Begley (2004) describe, as “goodness” – the composite vignette’s situatedness and authenticity (p. 391).

The four key findings of the study were identified towards the end of Chapter 5 and framed as a response to the research question, as follows:

Leaders in one education system developed system capacity to enable sustained engagement with moral purpose by:

1. Demonstrating a commitment to moral purpose, centred on the person of the learner, and an equal commitment to a way of working to enact moral purpose.
2. Participating in the process of capacity building.
3. Creating spaces for capacity building that were open to possibility and centred on relationships of trust.
4. Disrupting the usual stable and predictable ways of working and leading.

These findings will be used to structure the discussion in this chapter, where the experiences of leaders, in respect to each finding, will be interpreted in relation the conceptual framework I developed from the review of the literature in Chapter 3 (see Figure 6.1 below).

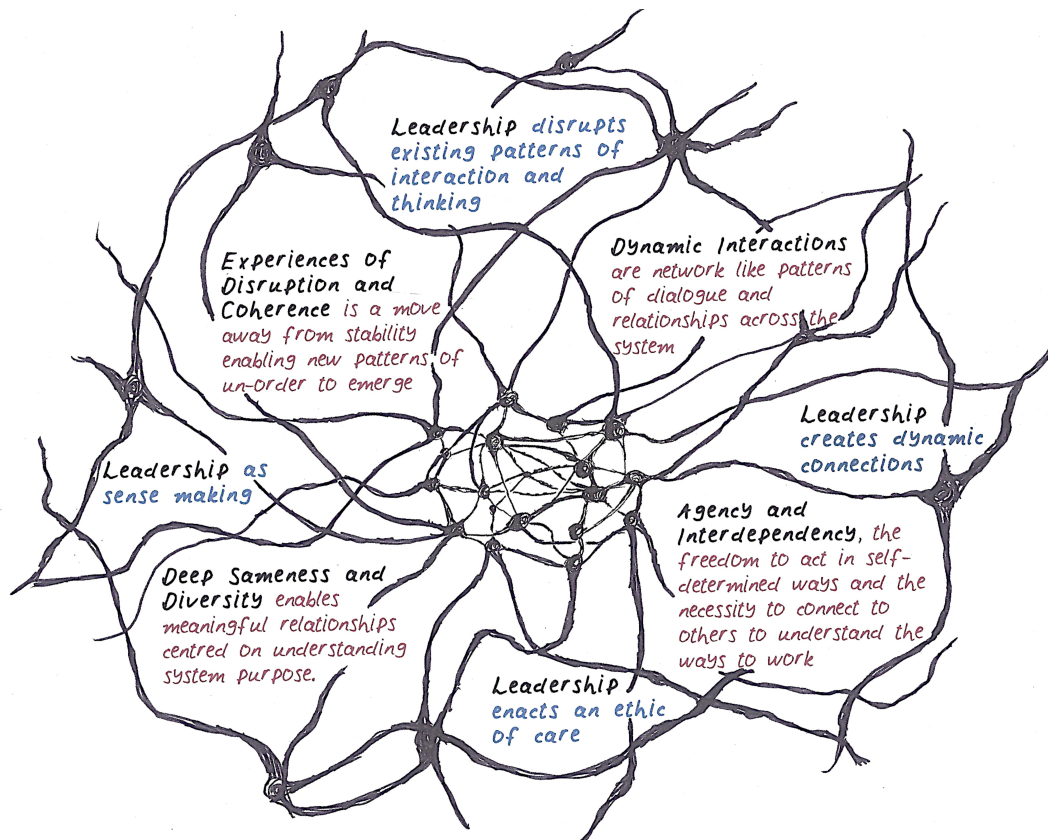


Figure 6.1. Conceptual framework (for a full page view see Chapter 3, Figure 3.14).

The discussion of each key finding will engage with the conceptual framework to identify the following:

- The enactments of leadership that enabled system capacity building.
- The conditions of emergence created by leadership.
- Emergent behaviours, understood as expressions of system capacity building.

This will result in a reconceptualisation of this framework and give insight into the deep ecology of one education system and how leaders in this system, the CESM, in the context of the *Leading for Learning Project*, enabled system capacity building; that is, how they enabled learning, their own learning and the learning of each other, and in particular how this was focused on the enactment of moral purpose. As such this discussion will provide a response to the research question guiding this study:

How do leaders in an education system develop system capacity building to enable sustained engagement with moral purpose?

During the discussion reference is made to the findings identified in Chapter 5, for example, (Interim finding 3-7) means thematic network 3 and interim finding 7. The purpose of this is to allow the discussion to be tracked back to the analysis process in Chapter 5. Each of the four key findings will now be discussed in turn.

6.1 Key Finding 1 – Leaders demonstrated a commitment to moral purpose, centred on the person of the learner, and an equal commitment to a way of working to enact this purpose

“There is a like-mindedness around our sense of moral purpose for why we are setting out to do this...and a commitment to the way the system can work...framed around trust and dialogue” (Steven).

6.1.1 The enactments of leaders that enabled system capacity building.

In relation to key finding one the following two leadership practices were identified as foundational in understanding the focus of system capacity building and how leaders enacted system capacity building:

1. Leaders created a strong narrative thread about moral purpose centred on the person of the learner, as well as a willingness to re-interpret moral purpose.
2. Leaders enacted an ethic of care by valuing human relationships, diversity, and dialogue.

These enactments of leadership bring attention to the purpose and identity of the education system, directly engaging leaders in the particular organisational and traditional narratives of the system, as well as how leaders understand their own personal narrative in relation to this. Such a focus brings to the fore the deeply connected and relational environments of education systems and how the human capacities within the system are integral to the emergent capacity of the organisation. Within the complexity literature the exploration of identity and purpose within complex adaptive systems is recognised as an area of productive debate. Kunneman (2010) and Cilliers (2010) suggest that leaders need to engage with multiple relations, human capacities, and narratives as an emerging process of defining and redefining organisational purpose and identity. The findings in this study support this position and provide insight into how leaders in an education system might do this and how this is integral to enabling system capacity building. Each of these leadership practices is now discussed.

1. Leaders created a strong narrative thread about moral purpose centred on the person of the learner, as well as a willingness to re-interpret moral purpose.

In the context of this study this enactment of leadership directly centred leaders' attention on the *person* of the learner (Interim finding 3-1). As one leader commented: "*the purpose of your work is about enabling students to live lives of promise, lives of service, flourishing and meaningful lives in today's changing world*" (Int 7, p.19). This aligns with Stoll's (2009) call for educative purposes focused on enhancing student learning in its broadest and fullest sense, as well as Hargreaves' (2009a) and Starratt's (2007) determination that learning should be meaningful and transformative for young people. Leaders in this study demonstrated a commitment to this moral purpose and a desire to deeply understand what it might mean (Interim findings 1-5; 3-1; 3-2): "*To really explore what it means to be a Catholic school...and to enact that. Not just pay lip service to it...we explored ideas, it wasn't jargon...we were actually trying to bring meaning to our work*" (Int 5, p.3). This exploration of moral purpose can be understood as capacity building, where the work of leaders was anchored in moral purpose, and strengthened by diversity of view about how the purpose might be understood and enacted across multiple settings (Interim finding 3-3). The findings suggest that *what* moral purpose is focused on matters, as it becomes the focus of exploration and, in turn, the focus of capacity building.

Leaders, individually and collectively, demonstrated an openness to reinterpret moral purpose in response to their local context (Interim findings 3-3; 1-4). This process of reinterpretation, with a movement towards shared understandings of moral purpose, was facilitated through dialogue (Interim findings 3-3; 1-5). The process of dialogue engaged leaders with the multiple and diverse narratives within the system, that both interrupted meaning, and offered meaning, to their understanding of moral purpose. Such a commitment to moral purpose by leaders, and a willingness to grapple with the emergent and contextualised meanings of moral purpose, was foundational not only in how they enabled system capacity building, but also how they understood their identity as leaders (Interim finding 1-7). As one leader commented, "*you can't offer this to kids if you're not finding a space in yourself for this.... understanding your own identity*" (Int 7, p.6). The inquiry and dialogical ways of working in the *Leading for Learning Project* encouraged leaders to reveal their own beliefs, uncertainties, and vulnerabilities, as well as grapple with a diversity of ideas within the setting (Interim findings 1-3; 3-2). The

findings of the study suggest that leader identity emerged from these dynamic and relational interactions in the system, bringing into play the question of ‘Who am I in this work?’ (Interim finding 1-7).

This study suggests that system capacity building is a dynamic and emergent process of identity formation, focused on enabling the capacities of each person to be fully expressed and contribute to the capacity of the system as whole. It can also be suggested that leader identity is simultaneously entangled with the emergence of the system’s identity (Interim finding 1-6). As has been identified, organisational identity is an important area of discussion within the field of complexity and the findings of this study, drawn from a particular organisational context, contribute to this discussion.

This enactment of leadership being explored in this section - *Leaders created a strong narrative thread about moral purpose centred on the person of the learner, as well as a willingness to re-interpret moral purpose* - is not reflected in the conceptual framework developed from a review of the literature in Chapter 3. Given the importance and influence of this leadership practice within the context of this study, and the significance of such a leadership practice within the complexity literature in expanding understandings about purpose and identity, it needs to be added to the conceptual framework developed in Chapter 3. This addition is reflected in Figure 6.2 towards of the end of this discussion of key finding 1.

In essence, such a leadership practice is centred on the purpose of the organisation, realised, as Kunneman (2010) suggests, through multiple dialogical and narrative encounters that engage the human capacities and potentials within the organisation in the enactment of its purpose. In this way the organisation claims its purpose and identity.

2. Leaders enacted an ethic of care by valuing human relationships, diversity, and dialogue.

Leaders’ commitment to moral purpose brought attention to the human capacities within the education system. The findings suggest that leaders in the *Leading for Learning Project* enacted an ethic of care by valuing relationships and diversity, seeking to listen and understand others, and by creating inclusive environments for dialogue (Interim

findings 1-1; 3-5; 4-9). One leader commented, *“I try not to assume everyone thinks the same... It’s about trying to create a space where people can come into the conversation... To build trust. To build respect. Trying to find a way in for people”* (Int 7, p. 5). Another leader recognised the uncertainty involved in creating such inclusive environments, *“It felt scary.... Because you didn’t know if you were on the right path.... but people felt comfortable enough to say what they wanted...it’s the trust and the honest communication”* (FG 2, p.18). In this way leaders created environments that were generative of new learning and new relationships, where individual and collective capacity could be nurtured through a deep exploration of moral purpose (Interim finding 4-12).

The findings of this study suggest that leaders enacted an ethic of care, thereby enabling the capacities and potential of those in the system to be expressed and contribute to the capacity of the education system to enact its moral purpose. Regine and Lewin (2000), Wicomb (2010), and Noddings (2012a) all comment that such enactments of leadership are underpinned by a care for the person and for relationships. As Kurtz and Snowden (2003) explain, this means human characteristics such as choice, uncertainty, diversity of view, reflection, and the enactment of particular values, are understood as integral to the capacity of the organisation, and should not be marginalised.

An *ethic of care* is one of the leadership practices identified in the conceptual framework developed in Chapter 3; this study confirms this practice as important in understanding education systems as complex adaptive systems, thereby creating a dynamic, relational, and emergent system focused on the enactment of moral purpose.

6.1.2 The conditions of emergence enabled by leadership.

In relation to key finding one two conditions of emergence were identified as being enabled by the leadership practices discussed above, providing further insight into how the leaders in the education system enabled system capacity building. They are as follows:

1. Deep sameness and diversity: *a commitment to the narrative of moral purpose, but only understood and experienced because of encounters with diversity.*
2. Disruption and coherence: *the interplay of diversity, anchored in relationships of trust and an emerging moral purpose.*

Each of these conditions of emergence is now discussed.

1. Deep sameness and diversity: *a commitment to the narrative of moral purpose, but only understood and experienced because of encounters with diversity.*

This study illustrates how a commitment to moral purpose is only deeply understood and experienced because of an encounter with difference. One of the conditions of emergence identified in the conceptual framework developed in Chapter 3 is the paradoxical experience of *deep sameness and diversity* (see for example, Cilliers, 2010; M. Mason, 2008; Uhl-Bien & Marion, 2009). This study confirms the importance of this condition of *deep sameness and diversity*, and is able to offer further exemplification of this condition. In the context of this study it can be suggested that deep sameness is manifest in the system and traditional narratives underpinning moral purpose, but there is also an openness to the emerging possibilities of these narratives through the interplay of diversity (Interim finding 1-4; 1-6). One leader gave expression to it in this way:

you have this notion of an open narrative. The story's never been absolutely completed. It is constantly your story, the bigger system's story, the whole thing evolves as different things come in and interrupt it, it has to be interrupted by stuff that is quite different to you' (Int 7, p.12)

This study offers an exemplification of *deep sameness and diversity* through exploring the enactments of leadership within a system that has a particular values stance or orientation. Kunneman (2010) suggests that much of the discussion about complex systems has been within the realm of understanding the general characteristics of complex systems when, what is needed, is discussion about the purpose and identity of systems that give rise to what is meaningful, what is possible, and what is just, as understood within the system's framework of values. This study contributes to this discussion, as the education system that is the focus of this study, has a particular values stance that is simultaneously deeply embedded within its narratives, but constantly contested through engagement with difference, giving rise to the education system's purpose and identity (Interim finding 1-6). The findings of this study suggest that it is through this dynamic interplay of deep sameness and diversity that individual and organisational identity emerges and is continually shaped by the multiple and rich narratives within the context of the system. Such findings are confirmed in the literature, and are identified by Kunneman (2010) and Cilliers (2010) as significant because they expand the focus of

complex adaptive systems beyond ‘what they are’ to an exploration of their identify and purpose.

2. Disruption and coherence: *the interplay of diversity, anchored in relationships of trust and an emerging moral purpose.*

The education system that is the focus of this study presents a tangible example of an organisation that has a particular values position, as reflected in its moral purpose, but simultaneously is engaged with seeking to disrupt any fixed or static meaning of its purpose. As one leader said, “*what we do is much more authentic has got much more integrity when our ideas about what we do are disrupted and pushed by others*” (Int 7, p16.) As outlined above, this can be described as the paradoxical experience of *deep sameness and diversity*. As Mason (2008), Uhl-Bien and Marion (2009), and Cilliers (2010) explain, this experience is understood as an enabling constraint, where disruption is only enabling if there is deep sameness – understood in this study as a deep commitment to moral purpose – that can offer coherence. This experience gives rise to the condition of emergence - *disruption and coherence* - identified as part of the conceptual framework developed in Chapter 3. This study confirms this condition of emergence, however it also suggests a further level of understanding to that offered in the conceptual framework.

The conceptual framework describes *disruption and coherence* as a move away from stability enabling new patterns of un-order to emerge (Figure 6.1). This study, while confirming this description, suggests that such a move away from stability needs to be centered in the context of the moral purpose of the education system. This study therefore, understands *disruption and coherence* as the interplay of diversity, anchored in the emerging narrative of moral purpose (Interim findings 1-6; 2-5; 2-2). It can also be suggested that it is the capacity of those within the system to hold this tension of *disruption and coherence* that gives rise to the process of identity formation, enabling leaders to give authentic expression to their own identity and, collectively, to give expression to the identity of the organisation.

The condition of emergence, *disruption and coherence* can also be understood in relation to the leadership practice of an ethic care, as discussed above. When framing *disruption*

and coherence in relation to an ethic of care, a further level of understanding is given to this condition of emergence. In enacting an ethic of care leaders identified the necessity of both trust and challenge, where relationships were founded on trust, but where these relationships were meaningful, because of the engagement with difference (Noddings, 2012b; Wicomb, 2010). As one leader commented:

The diversity of view got us into some challenging situations, but we spent time nutting it out, it was good learning, we got a collective sense of our work, it is recognising that challenge doesn't disconnect, what connected us was our openness to hearing what people thought. (Int 5, p.19)

Such an ethic of care as a leadership practice was therefore both disruptive in the challenge it offered, as well as enabling, in creating experiences founded on trust, thereby establishing system coherence.

This study can therefore offer an expanded understanding of disruption and coherence, one that is centred on relationships founded on both engagement with diversity and experiences of trust. This will be discussed further in Section 6.3.2.

6.1.3 Emergent behaviours understood as expressions of system capacity building.

The interpretation of key finding one, in relation to the conceptual framework developed in Chapter 3, has identified particular leadership practices (Sections 6.1.1) and concomitant conditions of emergence (Sections 6.1.2). A review of this discussion identifies three emergent behaviours that can be understood as expressions of system capacity building. They are as follows:

- Expressions of leader identity and the possibility of an emerging organisational identity.
- Renewed and emergent understandings of moral purpose and how it might be enacted across multiple settings.
- Ways of being in the system that are dynamic and relational centred on enabling human capacity.

The conceptual framework did not include any reference to emergent behaviours, but the findings of this study suggest that it is important to include these, as they are understood as expressions of system capacity building.

Figure 6.2 below represents the following, as identified through the interpretation of key finding one:

- The enactments of leadership that enabled system capacity building (red text).
- The conditions of emergence created by leadership (green text).
- Emergent behaviours, understood as expressions of system capacity building (blue text)

As outlined in the discussion above, some elements of the conceptual framework developed in Chapter 3 were confirmed, others were exemplified with new understandings, as well as some additions being flagged as necessary for inclusion. This figure reflects the development of a renewed conceptual framework.

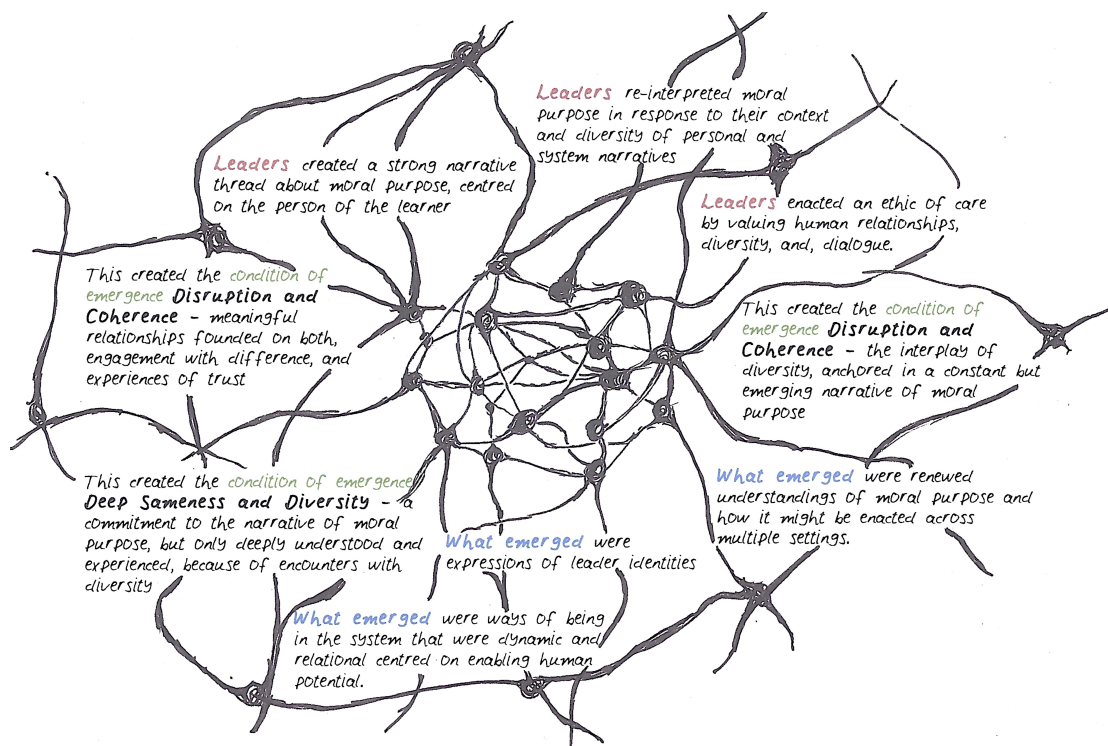


Figure 6.2. Key finding one: Renewed conceptual framework.

6.2 Key Finding 2 – Leaders participated in the processes of capacity building.

“This is about everybody” (Steven)

6.2.1 The enactments of leadership that enabled system capacity.

In relation to key finding two the following two leadership practices were identified as important in understanding how leaders enacted system capacity building:

1. Leaders participated in the processes of capacity building; in the processes of learning and dialogue.
2. Leaders acted as sense makers; making sense of an emergent order.

Participation in the system is a key premise of complexity theory. As Goodwin (2000) and Stacey (2003) suggest, leaders cannot conceive of themselves outside of what is happening to others, nor can they conceive of themselves as observers of what is happening to others. This study confirms this premise and illustrates how leadership participated in the processes of capacity building (Interim findings 1-1; 2-1). Scholars like Dooley and Lichtenstein (2008) describe this as leaders participating in the process of emergence. The findings of this study therefore suggest that capacity building can be understood as a process of emergence within education systems. While participation in the processes of capacity building is identified as an important enactment of leadership, it was not given prominence in the original conceptual framework. This is now considered a weakness in the conceptual framework developed in Chapter 3, and subsequently will be added to the renewed conceptual framework. Each of these leadership practices is now discussed.

1. Leaders participated in the processes of capacity building; in the processes of learning and the dialogue.

When leaders explored their experiences of capacity building in the *Leading for Learning Project*, they identified the processes of capacity building and described how they participated in these processes. Leaders described dialogue and learning as capacity building processes and identified the importance of being *in* the dialogue with others and being *in* the learning with others (Interim findings 1-1; 2-1; 4-7; 4-8). As one leader commented, *“it is about being in there with people – you’ve got to be in there with it, you’re not outside, you’re actually in it. This is about everybody” (In 3, p.43)*. The dialogue was inquiry focused; fostering ways of learning and leading that were

exploratory, open to diversity, and comfortable with uncertainty (Interim findings 1-1; 1-2; 4-6; 3-2: 4-5). The process of dialogue was experienced as a process of self-understanding where leaders were invited to explore their own beliefs and enactments of leadership in relation to moral purpose (Interim findings 1-7; 3-2). One leader reflected on her personal experiences of dialogue in this way; *“the shift has been in me – in what I know, who I am and what I do...- I can no longer be the same person I was”* (FG 5, p. 19).

The findings of this study suggest that by participating in the dynamic processes of learning and dialogue leaders were participating in the emergence of the system; that is, they were learning with and from each other and exploring existing and emergent meanings in the group. The processes of dialogue and learning not only influenced individual capacity, but also created a collective commitment to the intent of the work (Interim findings 1-5; 3-1). The findings of this study suggest that through participating in the dialogue, leaders were participating in a *way of being* in the system. One leader used the metaphor of bone marrow to describe this way of being:

each of us creates a thread.... when we come around the table, each of us brings a thread to this fibrous mass, and its organic and alive like bone marrow. Everything flows out of there, you feel enlivened, new energy comes back to me, that enables me to have another thread, and I can contribute to someone else...it’s through the dialogue and a commitment to moral purpose. (Int 3, p39)

The image of dialogue as many interconnected threads, as a flow of energy, and as life giving for the whole, captures an emerging ecology, where dialogue is a way of being in the system that is intimately and collectively connected to the moral purpose of the system.

While many leaders understood the importance of participation, there was a view expressed by some leaders in the study that suggested participation in the processes of capacity building was necessary for other leaders and teams, but not necessarily for them (Interim finding 3-7). These leaders focused on functionality and efficiency, setting up the necessary infrastructure (budgets, organisational structures) to enable capacity building of others. In not participating in the processes of capacity building, it is argued that these leaders are not participating in the process of emergence. Dooley and Lichtenstein (2008) and Gunnlaugson (2011) suggest that the capacity of such leaders, to be aware of the

emerging learning needs of system, and to amplify learning across the system, is diminished because they are not participating in the system. The findings of this study suggest that these leaders took an ‘outsiders’ view of the system, and therefore the learning and the capacity building became fragmented across the system.

2. Leaders acted as sense makers; making sense of an emergent order.

‘Sense making’ was identified in the conceptual framework developed in Chapter 3 as an important enactment of leadership. This study confirms the importance of sense making in offering meaning, and collectively constructing meaning, particularly when experiences are uncertain or ambiguous (Jäppinen, 2014). The findings of this study also suggest that sense making is important, and is most effectively enacted when leaders are participating in the processes of capacity building. Leaders acted as sense makers when they were learning, asking questions, exploring hunches, sharing their uncertainties, as well as encouraging others to explore possibilities and share their perspectives (Interim findings 1-3; 2-2; 4-6; 4-8). As ‘sense makers’ leaders were open to learning with others, and to experiences of “not knowing” (Interim finding 4-6). As one leader commented, *“one of things was not knowing the answer...we had some ideas, but it was very open. We’re not sure what it might look like, but let’s have the conversation about it” (FG 1, p.12)* This study suggests that leaders as ‘sense makers’ were leading from the ‘unknown’; they were taking their cues for leading from the collective experience of what was emerging in their context and leading from the experience and the exploration of what might be possible, rather than leading from predetermined certainty. As Jansen et al. (2011) and Plowman et al. (2007) suggest, leaders are making meaning from what is emerging and bringing attention to emergent ideas or patterns of behaviour that might otherwise go unnoticed.

This study confirms the importance of leader as sense makers and suggests that this was possible because leaders were participating the processes of capacity building that is, thereby participating in the process of emergence.

6.2.2 The conditions of emergence enabled by leadership.

In relation to key finding two three conditions of emergence were identified as being enabled by the leadership practices discussed above, providing further insight into how the leaders in the education system enabled system capacity building. They are as follows:

1. Disruption and coherence: *leading from experiences of possibility rather than certainty.*
2. Patterns of participation: *enabling and constraining emergence in the system.*
3. Agency and interdependency: *the freedom to participate and the necessity for interdependency.*

Each of these conditions of emergence is now discussed.

1. **Disruption and coherence:** *leading from experiences of possibility rather than certainty.*

The enactment of leadership as sense making often disrupted the expectations others had of leadership. In this study leaders disrupted the usual ways of leading, in particular, when leaders were not determining or outlining the project outcomes and processes for implementation. This was a source of frustration for some leaders, as one commented, “*We’re looking for people to lead and they’re not there*” (FG 2, p.11). Rather than leading from a position of certainty, leaders were making sense of an emergent order, where the learning, the questions, and the collective capacities of the group were used to discern a way forward in the project (Interim findings 1-3; 4-1; 4-6). This challenged the assumptions some leaders had about leadership, as one leader commented, “*I think I was coming to understand...maybe it’s we’re too used to being given the answers and led*” (FG 2, p.15). While leadership as sense making was disruptive, it also offered meaning to what was emerging by continuously making connections to the purpose of the work and creating experiences of coherence within the project (Interim finding 2-10; 4-10). As one leader, who was initially frustrated, commented, “*You lead through making connections, being really clear about that. Not necessarily knowing where to go...but we do know we want to improve learning and teaching in a Catholic school*” (FG 2, p.21). The findings of this study demonstrate the importance of leaders as sense makers within dynamic environments, where leaders simultaneously disrupted the usual ways of being a leader, as

well as offering coherence, by connecting the emergent learning to the enactment of moral purpose.

2. Patterns of participation: *enabling and constraining emergence in the system.*

The findings in this study suggest that the condition of emergence, identified on the conceptual framework as dynamic interactions, be replaced by a new descriptor, *patterns of participation*. This brings attention to two important concepts in this study— participation and patterns of interaction - and how they both enabled and constrained an emergent order in the system (Kurtz & Snowden, 2003). Leaders created these patterns of participation when they engaged in dialogue, responded to feedback, and explored questions about moral purpose across multiple dimensions of the system (Interim findings; 1-2; 1-4; 2-1; 2-4; 2-6; 2-7) These patterns of participation can be understood as processes of capacity building that enabled leaders to collectively understand what *has* happened, what *is* happening and what *is emerging* as possible learning and direction for the work (Interim findings 4-5; 4-6). In this way, leaders were participating in the process of emergence, where capacity of self, and of others to lead, emerged in the unfolding possibilities of the system.

The process of collaborative inquiry created these *patterns of participation* giving rise to an emergent “un-order”. Kurtz and Snowden (2003) suggest this is not a lack of order, but a different kind of order, an order that emerges through interactions. One leader expressed the pattern of collaborative inquiry in this way: “*it’s drilling down deeply into what people believe...a sort of spiraling down and up...where you go through this inquiry and pose questions and constantly come back to think...you come in and out of this in your own time and place.... into this deepening ... it sort of propels people forwards, it is a sort of movement*” (Int 7, p. 15). This study appears to legitimise an emergent order where learning, new relationships, and ways of thinking, emerge from the patterns of participation within a collaborative inquiry (Interim findings 2-4; 2-7; 3-5; 4-2). However, this was only possible because the emergent order was both enabled and constrained by the participation of leaders in exploring the possibilities of moral purpose (Interim finding 3-3). The findings of this study suggest that the process of collaborative inquiry, focused on questions of moral purpose that mattered to the system as a whole and to the multiple

local contexts across the system, created interdependent relationships across the system centred on the possibilities of system learning.

3. Agency and interdependency: *the freedom to participate and the necessity for interdependency*

If the condition of emergence identified in this study as *patterns of participation* is to be enabled in the system it is suggested that there needs to be choice that enables participation and which is not constrained by pre-determined structures or outcomes (Interim findings 1-2; 3-4). Choice offered freedom, as one leader commented, “*it was like, here are all the possibilities ...what’s your path through all this, it was much more freeing, there was greater ownership*” (FG 1 p.6). These opportunities to participate in the processes of capacity building created *agency and interdependency* within the system, and is one of the conditions of emergence identified on the conceptual framework developed in Chapter 3 (Jansen et al., 2011; Uhl-Bien & Marion, 2009). Leaders in this study experienced agency as the freedom to explore ideas, to question, to problem solve and to learn in response to the needs of their students (Interim findings 1-2; 1-4; 3-4). As one leader commented, “*there was an openness that left us to decide what way is going to be best for us*” (FG 1, p. 3). While these opportunities enabled agency, leaders also expressed the need to be connected to others if they were to make sense of these emergent ideas (Interim findings 2-10; 3-3; 4-10; 4-13). As one leader commented, “*the confusing state meant a whole lot of things were explored... we had to have the rigorous conversations*” (FG 1, p.7). While leaders experienced agency in the freedom to respond to their own context, they were simultaneously enabled and constrained by the interdependency necessary to grapple with questions about the enactment of moral purpose (Interim findings 2-2; 2-5; 3-3) (Cilliers, 2010; Uhl-Bien & Marion, 2009). The findings of this study suggest that it is this paradoxical experience – the tension of agency and interdependency - that enabled leaders to be focused on learning within their local context, but enriched by being connected to the collective learning across the system.

6.2.3 Emergent behaviours understood as expressions of system capacity building.

The interpretation of key finding two, in relation to the conceptual framework developed in Chapter 3, has identified particular leadership practices (Sections 6.2.1) and concomitant conditions of emergence (Sections 6.2.2). A review of this discussion identifies two emergent behaviours that can be understood as expressions of system capacity building. They are as follows:

- The capacities of leaders to collectively respond to emergent learning and lead from uncertainty and possibility.
- Ways of being a leader that were participatory, dialogical and relational that were centred on understanding and enacting moral purpose.

The conceptual framework did not include any reference to emergent behaviours, but the findings of this study suggest that it is important to include these, as they can be understood as expressions of system capacity building.

Figure 6.3 below represents the following, as identified through the interpretation of key finding two:

- The enactments of leadership that enabled system capacity building (red text).
- The conditions of emergence created by leadership (green text).
- Emergent behaviours, understood as expressions of system capacity building (blue text)

As outlined in the discussion above, some elements of the conceptual framework developed in Chapter 3 were confirmed, others were exemplified with new understandings, as well as some additions being flagged as necessary for inclusion. This figure reflects the development of a renewed conceptual framework.

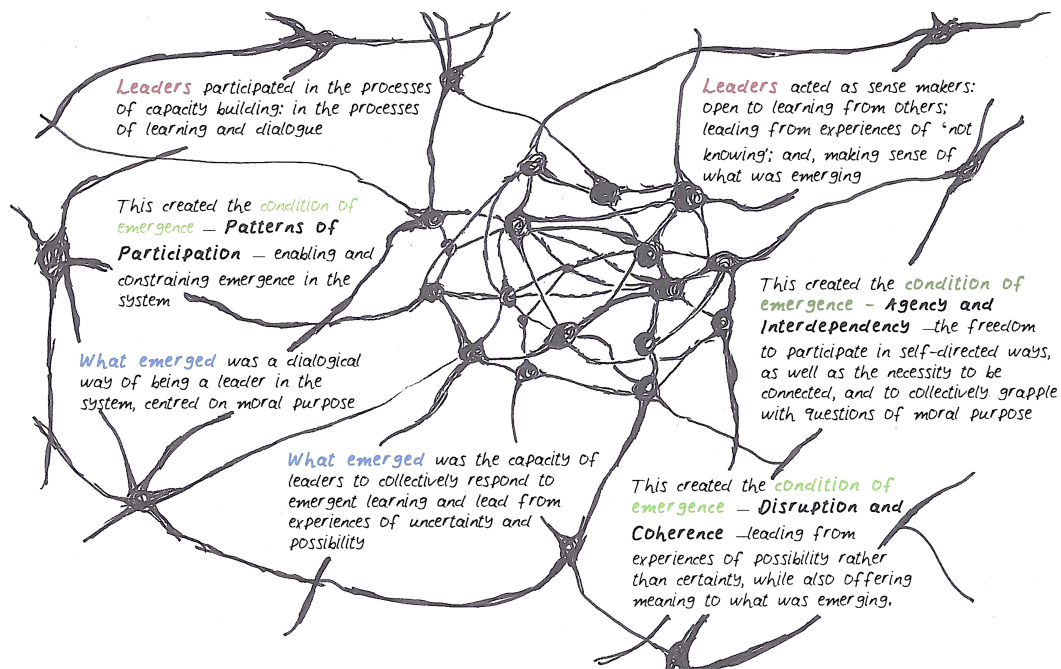


Figure 6.3. Key finding two: Renewed conceptual framework.

6.3 Key Finding 3 – Leaders created spaces for capacity building that were open to possibility and centred on relationships of trust

“I had a sense that anything was possible” (Dianne)

6.3.1 The enactments of leadership that enabled system capacity building.

In relation to key finding three the following two leadership practices were identified as important in understanding how leaders enacted system capacity building:

1. Leaders created space for learning that were open to possibilities.
2. Leaders stepped away from certainty and created space for new ideas and ways of working to emerge.

In this study leaders often used the word space to describe their experiences of capacity building and leadership; creating a space to explore new ideas, a space for risk taking, creating a space for people to come into the conversation, the space between people, finding a space within yourself or the “we” space. It is therefore important to understand why these experiences of “space” were important for leaders. The field of complexity research offers insight into how the experience of “space” can be understood. Osberg (2009) identifies a shift in how the term space is understood; a shift from linear and defined experiences to experiences that are exploratory, relational, and emergent, with

undefined possibilities. In the complexity literature, the dynamic interactions in the system are understood as creating these spaces that expand the scope of possibilities, beyond what is expected or known (see for example, Lichtenstein & Plowman, 2009; Osberg, 2009; Uhl-Bien & Marion, 2009). This study confirms this conceptualisation of space as characteristic of complex systems and is able to provide insight into the experience of space; how leaders created “spaces of possibility” and how these experiences of space enabled system capacity building. Each of these leadership practices is now discussed.

1. Leaders created spaces for learning that were open to possibilities.

This study provides examples of how spaces for learning emerged in the system and how these spaces can be understood as spaces for capacity building (Interim findings 1-4; 2-6; 3-4). The conceptual framework includes reference to ‘spaces of possibility’ within the discussion about the condition of emergence, *dynamic interactions*. However this study is able to provide further explanation about how such an idea might be conceived in practice.

One leader in this study described how a space for capacity building was created when the questions and the learning that surfaced from working with others, gave rise to new ideas and action: *“we had this sense that it was okay to question ... and it was through the reflection and the conversation, that we had the discovery, that some of this stuff doesn’t suit us anymore, if we hadn’t been through this we would have continued to do what we’ve always done – it was the conversations – that was a big growth point for us”* (FG 1, p.8) (Interim finding 2-4; 4-12). This finding suggests that a relational dynamic between people was experienced, fostering trust and enabling learning and emergence within the setting. Another leader described how the experiences of freedom to explore and to be in dialogue around questions of moral purpose created a space for capacity building where possibilities could be explored (Interim findings 1-2; 1-4; 2-6). *“It’s in the conversations...it gives you the opportunity to build something new ...I think that is really building capacity”* (FG 5, p.18). The findings of this study suggest these spaces for capacity building were unrestricted, where leaders had time to learn and explore possibilities in response to emerging needs without having to conform to a “right way” As one leader commented, *“I had a sense that anything was possible... We weren’t having*

to make something fit us” (FG 1, p.6) (Interim findings 3-4). It can be suggested that these spaces for capacity building can be characterised in the following ways: time and freedom available to generate ideas and explore possibilities beyond what is known; involvement in the dynamics of learning; being able to respond to this learning; and, relationships of trust.

These spaces for capacity building were also created when leaders engaged with the diversity of view in the system. One leader commented how *“there was a real openness to explore and to push people’s thinking” (Int 3, p.4)*, and another leader observed, *“unless you are challenged to think outside your realm of knowledge, you’re not growing” (Int 4, p.11)* (Interim finding 2-5). Leaders were willing to be influenced by different perspectives, even when this challenged established views and ways of working. As one leader reflected, *“I think it got us into some challenging situations...but also some very good learning situations because of the different experiences” (Int 5, p. 15)*. The findings suggest that leaders were able to create spaces for capacity building that were open to emergent learning, inviting many people to participate in the work of the project (Interim findings 3-3; 4-1; 4-2). While these spaces for capacity building can be described as unrestricted, they were also constrained by the very participation of leaders: by the diversity of ideas; by their uncertainties; and, their questions, as they struggled, at times, to make sense of the work. The findings in this study suggest that such spaces for capacity building are both enabled and constrained by the participation of leaders, and in doing so they became, as Davis and Sumara (2006) and Jansen et al. (2011) suggest, experiences of learning and adaptation.

2. Leaders stepped away from certainty and created space for new ideas and ways of working to emerge.

These spaces of possibility seemed to emerge when leaders stepped away from the expectation of being certain of the right path and from assuming certainty of self-knowledge; when they did this they able to enact leadership from experiences of uncertainty or a from an emerging sense of possibility (Interim findings 1-4; 2-6; 4-1; 4-5; 4-6). *“As a leader it is about putting out your own ideas. Not holding back...and knowing that it might not be taken up, or it will evolve or emerge” (Int 7, p.4)*. The experiences of uncertainty were often uncomfortable, as the usual expectations about the project and

leadership were not being met. As one leader reflected: *“I think I was coming to understand...maybe it’s we are too used to being given the answers and led...maybe the process is for us to explore in ourselves, our own capacity”* (FG 2, p.15). This discernment of stepping way from certainty created an impetus for leading learning of self and of others in response to the local context, where conversations about the challenges and the possibilities of the work were a necessity for progressing the work (Interim finding 4-13). This study confirms Osberg’s (2009) descriptions of space as exploratory, relational, and emergent, with undefined possibilities and suggests that in stepping away from certainty leaders were stepping away from linear and defined experiences of space. This study understands these spaces as spaces for capacity building that enabled leaders to go beyond what was known, and to explore other ways of working and being in the system.

3. Leaders attended to relationships between people.

These spaces for capacity building can also be understood by paying attention to the quality of interactions within the system, in particular, how leadership developed relationships of trust in these often challenging and uncertain environments. Bradbury and Lichtenstein (2000), Lichtenstein et al. (2006), Lichtenstein and Plowman (2009), and Kurtz & Snowden (2003) all comment on how relationships are foundational to enabling the emergence of new ideas and ways of working in the system. This is reflected in the conceptual framework developed in Chapter 3 and is identified as the leadership practice of *creating dynamic connections*. This study confirms this view and brings specific attention to the relationships underpinning the dynamic connections created by leaders. The findings of the study suggest the importance of the following: leaders paying attention to what happens between people; leaders participating in these relationships; and, leaders experiencing the challenges and the uncertainty of these relationships (Interim findings 2-8; 2-9; 3-5; 4-3; 4-9). One leader described this experience as *“leadership from within, it’s not leadership from without”* (FG 1, p.11). When leaders were attentive to what was emerging in the space and how this was being experienced, they were able to foster an interconnectedness between people, enabling both individual and collective capacity to emerge and to be focused towards understanding moral purpose (Interim finding 4-10).

In the complexity literature these spaces of possibility are described by Lichtenstein and Plowman (2009) as holding the “seeds of emergence” - the seeds of new ideas, new relationships, and new ways of working. This study confirms this concept and can provide examples of how “seeding” occurred, and more specifically, how it occurred through the interactions between people. One leader described the experience in this way:

the people in the project.... generate new ways of working that will reform. That's where the reform will come from: in the person and in their interactions, through modeling new relationships and trust ... to get people re-thinking the way they do things...if you trust people and we set up environments then new ideas will emerge. (In 3, p.20)

The findings of this study suggest that it is people and what happens between people that ‘hold the seeds of emergence’ rather than the project or the initiative as the catalyst of change. It follows, as Davis and Sumara (2006) and Morrison (2008) suggest, that it is people, and what happens between people, that hold the possibilities for amplifying new ways of learning, working, and being across the system. This study suggests that when attention is given to establishing trusting relationships, focused on enabling the capacities of people, then the seeds of new ideas and ways of working will emerge that strengthen the capacity of those in the system in their efforts to enact moral purpose (Interim findings 1-1; 2-10; 3-5; 4-3; 4-4; 4-9; 4-10).

While many leaders experienced these spaces for capacity building as spaces for learning there were also experiences within the project where the existing organisational structures closed down the possibilities for learning and therefore, capacity building (Interim findings 1-8; 2-3; 3-6; 3-8). As Osberg (2009) suggests, ‘space’ can be a difficult concept to conceive if organisational charts determine the relationships between people and if the outcomes of the work are predetermined. The findings of this study confirm this view, as some leaders in the project described how the culture of positional power, founded on hierarchical structures and roles, “*got in the way*” of enabling individual and collective capacity building focused on learning (Interim finding 3-6). This was experienced when the emphasis was on the function of the education system, on the “*input output, that you put something in and then automatically there is going to be an output*” (Int 3, p.14). These environments influenced the nature of relationships within the system. One leader described the relationship as ‘*gatekeeping*’, where the existing vertical and horizontal levels within the education system, and the roles embedded in those structures, did not

enable leaders to make the connections necessary to furthering understandings about the work. The effect of this became evident when the existing relationships no longer provided the diversity of view or the challenge necessary to progress thinking around important issues (Interim finding 2-3). As she says: *“We just keep closing it off”* (Int 7, p.13). From the perspective of scholars like Cilliers (2010), Mason (2008), and Uhl-Bien and Marion (2009), when diversity is minimised and relationships restricted the potential of the human person is not fully expressed and, in turn, the capacity of the system is diminished. This study indicates that if pre-existing organisational structures control how people connect and how their ideas and feedback flow, then it is likely that the potential of the human person is not fully expressed, that the emergent learning from a diversity of relationships is diminished and, in turn, the capacity of the system is not fully realised.

This study also identifies how these kinds of organisational structures can influence the kinds of conversations leaders are willing to have. Where teams focused their conversations on administration and consistency of service across groups, there was a silence on conversations about learning or capacity building (Interim finding 3-8). As one leader commented *“I don’t think we were game enough to go there...it would have been too hard for us to even get that consistency of understanding”* (FG 6, p.14). The findings of this study indicate that where relationships are founded on organisational structures, rather than on a dynamic web of human relationships as Cilliers (2010) suggests, leaders are denied the opportunity to experience robust dialogue focused on learning and capacity building. When relationships of learning, and the diversity of expression that ensues, is diminished the capacities of individuals and the collective may not be fully expressed and, in turn, the capacity of the system is not fully realised (Interim finding 3-6).

6.3.2 The condition of emergence enabled by leadership.

In relation to key finding three one condition of emergence was identified as being enabled by the leadership practices discussed above, providing further insight into how the leaders in the education system enabled system capacity building. The condition of *trust and challenge*:

1. Trust and challenge: *enabling relationships of trust to emerge through experiences of challenge and uncertainty*

This condition of emergence will now be discussed.

1. Trust and Challenge: *enabling relationships of trust to emerge through experiences of challenge and uncertainty*

This study identifies an additional condition of emergence, *trust and challenge*, not addressed in the conceptual framework developed from the literature in Chapter 3. The condition of trust and challenge is understood as an enabling constraint, where trust is necessary if capacity is to emerge from challenging environments. However, it is from these experiences of challenge and uncertainty that the trust emerges. It is this paradoxical experience – the tension of trust and challenge identified in this study - that establishes system coherence within dynamic and emergent environments. While the condition of trust and challenge can be understood in relation to *disruption and coherence* (as described in Section 6.1.2), as identified on the conceptual framework developed in Chapter 3, the emphasis here is on how it is understood within relationships.

Leaders often experienced these spaces of possibility or spaces for capacity building as risky, uncertain, and challenging. In these experiences they recognised the importance of trust if learning and new ways of working were to emerge (Interim findings 2-8; 3-5; 4-3; 4-9; 4-10). One leader said it felt risky because it meant revealing your capacities and uncertainties to others, *“it takes risk (this way of working and trusting people)... you’ve got to be comfortable and confident in your own capacity and comfort level of not knowing”* (Int 3, p43). Another leader expressed unease as trust emerged from the struggle of capacity building, *“it’s that discomfort ...it’s about being able to jump into the murk, but have the confidence in the relationships and in the fact that being in the murkiness together builds capacity”* (FG 4, p21). Leaders also recognised the necessity of being transparent, *“you’ve just got to put your ideas out there and it will go where it goes – you’ve just got to see what happens”* (Int 7, p4). The findings of this study illustrate how leaders experienced uncertainty and challenge as they grappled with important questions in changing environments and, while this increased the potential for individual and system capacity, this was only possible if leaders also experienced mutual respect, trust, and safety in relationships.

6.3.3 Emergent behaviours understood as expressions of system capacity building.

The interpretation of key finding three, in relation to the conceptual framework developed in Chapter 3, has identified particular leadership practices (Sections 6.3.1) and a concomitant condition of emergence (Sections 6.3.2). A review of this discussion identifies two emergent behaviours that can be understood as expressions of system capacity building. They are as follows:

- A system way of working framed around relationships of trust and the challenge of grappling with moral purpose.
- New learning, new relationships, new questions, and new ways of working emerging from experiences of participation (seeds of emergence).

The conceptual framework did not include any reference to emergent behaviours, but the findings of this study suggest that it is important to include these, as they can be understood as expressions of system capacity building.

Figure 6.4 below represents the following, as identified through the interpretation of key finding three:

- The enactments of leadership that enabled system capacity building (red text).
- The conditions of emergence created by leadership (green text).
- Emergent behaviours, understood as expressions of system capacity building (blue text).

As outlined in the discussion above, some elements of the conceptual framework developed in Chapter 3 were confirmed, others were exemplified with new understandings, as well as some additions being flagged as necessary for inclusion. This figure reflects the development of a renewed conceptual framework.

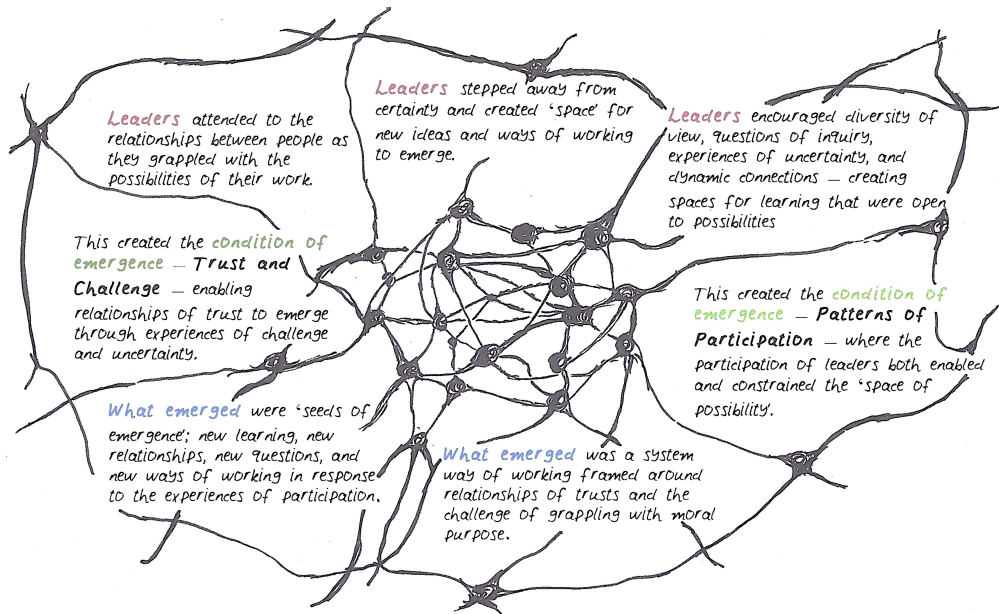


Figure 6.4. Key finding 3: Renewed conceptual framework.

6.4 Key Finding 4 – Leaders disrupted the usual stable and predictable ways of working and leading

“Maybe we’re too used to being given the answer and led” (Margaret)

6.4.1 The enactments of leadership that enabled system capacity building.

In relation to key finding four the following two leadership practices were identified as important in understanding how leaders enacted system capacity building:

1. Leaders created open designs for learning that disrupt the usual stable and predictable ways of working and leading.
2. Leaders engaged in challenging conversations and engaged with a diversity of view, offering meaning to what was emerging.

Initially, many leaders in the project were frustrated and confused because their expectations of a system project were not being met. They felt uncertain about the direction of the project and how to begin the work. The project design disrupted the usual stable and predictable ways of working that had come to be expected within the system. Scholars in the field of complexity research, like Uhl-Bien and Marion (2009), Lichtenstein and Plowman (2009), and Davis and Sumara (2006) identify disruption as a necessary condition of emergence if new possibilities are to emerge within the organisation. This study confirms the necessity of this condition of emergence and is able

to provide examples of how disruption manifested, what emerged because of these experiences of disruption, and how disruption enhanced capacity building enabling those in the system to be focused on the enactment of moral purpose. Each of these leadership practices is now discussed.

1. Leaders created open designs for learning that disrupted the usual stable and predictable ways of working and leading.

The design of the project challenged the predictability and certainty that had come to be expected of system initiated projects (Interim finding 4-2). As one leader in a school setting commented, *“It was the first time I sensed this confusion – normally going into these sorts of projects we would be told what we are doing. It wasn’t even like we had an idea, this was very open”* (FG 1, p.4). The project design was focused on exploring questions of inquiry that were of genuine interest to the education system in understanding moral purpose. However, none of the usual signposts - prescribed sets of outcomes or implementation plans - were apparent. As a leader in an education office commented, *“there is no neat package. It is not a list that tells you everything to say and do. The project has none of those guidelines. It is about how do I interpret that? How do I make sense of that and then how we make sense of that collectively?”* (Int 2, p.36). Rather, the project was focused on understanding moral purpose through a process of collaborative inquiry across multiple settings. These deliberate decisions disrupted the stable and predictable ways of working and, as Lichtenstein and Plowman (2009) suggest, pushed thinking and practice into the realm of uncertainty thereby enabling an emergent order (Interim findings 2-5; 2-7; 3-3; 4-2). Such open designs for learning also challenged the assumption that one part of the system could build and direct the capacity of another part of the system. The findings of this study suggest that this way of working can be understood as a design for system capacity building or a design for system learning.

2. Leaders engaged in challenging conversations and engaged with a diversity of view, offering meaning to what was emerging.

The project design created opportunities for leaders to engage with a diversity of expertise, knowledge, and worldviews from across the system. Cilliers (2010) and Osberg

(2009) identify diversity as central in understanding complex adaptive systems, as it is the plurality of views in dynamic relation to each other that enables emergence. The findings in this study, while they identify the importance of diversity, also demonstrate how the experience of diversity was disruptive for leaders, and to the extent these disruptive experiences enabled capacity building (Interim findings 2-2; 2-5; 2-7; 4-1). The variation was identified, first, in how diversity was understood and experienced and, second, in the extent to which leaders in the settings were attentive to the experiences of disruption (Interim findings 2-8; 2-9; 3-3; 4-3).

In some settings leaders understood experiences of diversity as necessary to progress their work. While these experiences were uncomfortable and unsettling, leaders recognised the need “*to be pushed by other people’s thinking*” (Int 7, p.18) if they were going to address the challenging and complex questions emerging in their work (Interim finding 2-5). They were also open to being influenced by the different ideas and perspectives, as one leader commented, “*You want objection. You want different points of view, but [it only happens] when there is an openness to receive an alternative view*” (Int 3, p.39) (Interim finding 2-7). This disposition seems to be important, otherwise diversity can be construed as “*having your say*” (Int 4, p.10) when, what is necessary, as Cilliers (2010) and Osberg (2009) point out, is an active engagement with plurality of views and an openness to be influenced by them. The findings of the study suggest that the experience of diversity was productive for individuals and for groups when leaders were participating in the challenging conversations, and were willing to be influenced by diversity. In this way leaders were able act as sense makers; making sense of what was collectively being experienced with others (Interim findings 1-3; 1-5; 2-10; 3-3; 4-4). One leader, who experienced the challenge of engaging with different views, comments, “*What connected us was our openness to hearing what other people thought*” (Int 5, p.19). This study suggests that when leaders actively engaged in ‘sense making’, these often challenging experiences of grappling with diversity enabled individual and collective capacity building.

In other settings, however, leaders experienced diversity as a limitation as it disrupted the usual efficient ways of working, as different views were being offered for consideration about questions significant to their work. As one leader commented, “*the challenge can be stifling and you don’t learn, or you can say here’s a group who thinks very differently,*

how do I forge away through” (Int 2, p.5). Leaders, in these settings, struggled to make sense of what was happening as there seemed to be little opportunity for dialogue exploring the different worldviews, and how they might collectively contribute to new insights and understandings about the purpose of the work (Interim finding 1-8). Assumptions remained unchallenged in the setting, and the uncertainty and frustration continued, with individuals becoming isolated and retreating to known ways of working. In these settings, it can be suggested that leadership as sense making was absent. There was an absence of leadership actions focused on noticing what was happening for others, and making sense of this in relation to the questions guiding the work of the project.

This study confirms the importance of leaders being attentive and present to what is being experienced by others, and the importance of leaders participating in these experiences, rather than assuming, from a distance, that teams are making sense of what is happening (Interim finding 2-9; 3-5; 4-7). The findings of this study suggest that when leaders act as sense makers they increase the possibility of disruptive experiences offering meaning and enabling capacity building (Interim findings 2-9; 2-10; 4-3). When leaders engaged in sense making practices they were able to provide experiences of coherence, in the midst of disruption and uncertainty.

6.4.2 The condition of emergence created by leadership.

In relation to key finding four two conditions of emergence were identified as being enabled by the leadership practices discussed above, providing further insight into how the leaders in the education system enabled system capacity building. They are as follows:

1. Disruption and coherence: *experiences of an emergent ‘un-order’ through inquiry focused on system learning*
2. Agency and interdependency: *responsive to local contexts as well as exploring questions of system inquiry.*

Each of these conditions of emergence is now discussed.

- 1. Disruption and coherence:** *experiences of an emergent ‘un-order’ through inquiry focused on system learning.*

The findings of this study suggest that if leaders are to stay with the experiences of disruption and uncertainty, and be open to the possibilities of such experiences, there needs to be simultaneous experiences of coherence. Disrupting the stability and predictability of habitual expectations provoked frustration and confusion for some leaders. As described above, some leaders were unable to make sense of the disruption; they felt isolated and retreated to known ways of working. For these leaders there seemed to be no simultaneous experiences of coherence, as there was an absence of leaders acting as sense makers.

Other leaders however, were able to stay with the experiences of disruption and uncertainty. These experiences become a catalyst for leaders developing their own capacity and how they might engage with the emerging purpose of their work in their own setting (Interim finding 4-1; 4-2). One leader, initially frustrated by the lack of direction, reflected on his developing awareness *“We stepped up...and we lead the project in our own school...that's where we did our best work...leading the discussions...and what it looks like for us. The honest communication we were striving for really came out through the process (FG 2 p. 10)*. Another leader, again initially frustrated, retrospectively recognised what was happening, *“There was an openness that left it for us to decide what was going to be best for us... that's where the capacity building came from, it was a really good way to go’ (FG 1 p.3)*. The findings in the study suggest that these leaders were able to stay in these experiences of disruption and uncertainty because they turned their attention to enabling the capacities of themselves and their colleagues and, importantly, they were committed to keeping the conversations open with a broad range of people in their setting (Interim findings 1-5; 2-2). As Boal and Schultz (2007) suggest, leaders who participate in challenging conversations and engage with a diversity of ideas enable conditions for emergent learning and ways of working to be established within the local setting (Interim findings 2-5; 2-7; 4-1; 4-5).

The findings of this study confirm that when leaders were able to ‘stay with the disruption’ and keep connected to each other through dialogue, they were able to go on and initiate, design, and enact ways forward that were responsive to their local context and their particular question of inquiry, thereby giving them experiences of coherence centred in their own local context.

2. Agency and Interdependency.: *responsive to local contexts as well as exploring questions of system inquiry.*

These experiences of disruption and coherence, as described above, created an environment of emerging agency within the project. This shifted the locus of capacity building from being external to their unique settings, to becoming centred within their local setting (Finding 4-2). The attention of leaders shifted from ‘... *is this what we are supposed to be doing, have we got it right...what should we do next*’ (FG 1, p.4) to attending directly to what was happening within their own setting. “*What is best for us, what is best for your students, that was very freeing*” (FG 1, p.7) (Interim finding 4-2). The experience of agency enabled leaders to recognise the choices and possibilities the project offered and to determine their own ways of working in response to their context (Interim finding 3-4). The findings suggest that the experiences of disruption created freedom and agency, however, if leaders were to stay with the uncertainty that ensued, they needed to keep connected to what was emerging within their setting, as well as beyond their setting (Interim findings 2-10; 4-4; 4-5; 4-10). These experiences of disruption, therefore, not only developed a sense of agency, but also strengthened the interdependencies within and across groups creating experiences of coherence in the *Leading for Learning Project*.

6.4.3 Emergent behaviours understood as expressions of system capacity building.

The interpretation of key finding four, in relation to the conceptual framework developed in Chapter 3, has identified particular leadership practices (Sections 6.4.1) and concomitant conditions of emergence (Sections 6.4.2). A review of the discussion identifies three emergent behaviours that can be understood as expressions of system capacity building. They are as follows:

- The capacity of leaders to make sense of an emerging order, as a way of understanding challenging and complex questions.
- The capacity of leaders to ‘stay in’ the experiences of disruption enabling new learning, new relationships, and new ways of thinking about questions of moral purpose.

- Localised capacity building and interdependencies across the system; connecting local learning to system learning.

The conceptual framework did not include any reference to emergent behaviours, but the findings of this study suggest that it is important to include these, as they can be understood as expressions of system capacity building.

Figure 6.5 below represents the following, as identified through the interpretation of key finding four:

1. The enactments of leadership that enabled system capacity building (red text).
2. The conditions of emergence created by leadership (green text).
3. Emergent behaviours, understood as expressions of system capacity building (blue text).

As outlined in the discussion above, some elements of the conceptual framework developed in Chapter 3 were confirmed, others were exemplified with new understandings, as well as some additions being flagged as necessary for inclusion. The figure below reflects the development of a renewed conceptual framework.

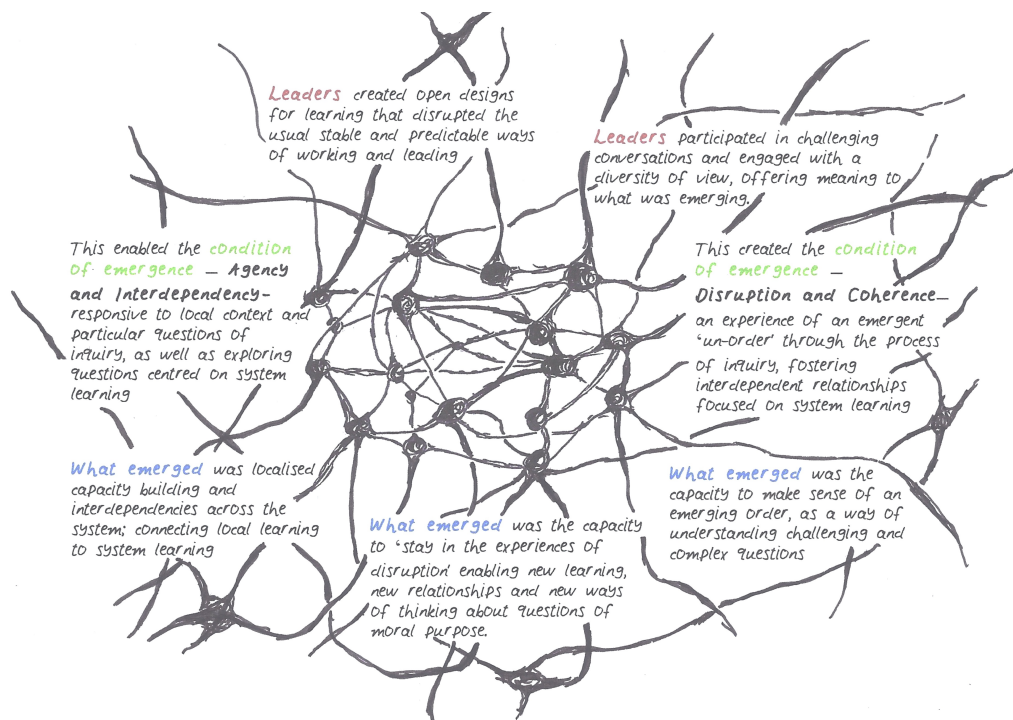


Figure 6.5. Key finding four: Renewed conceptual framework.

6.5 Key Findings of the Study and the Renewed Conceptual Framework

In this chapter each of the four key findings framing the experiences of leaders has been interpreted in relation to the conceptual framework developed from the synthesis of the literature in Chapter 3. This study, through its engagement with the field of complexity theory, has been able to provide insight into each of the four key findings, in relation to these three areas:

- The enactments of leadership that enable system capacity building.
- The conditions of emergence enabled by these enactments of leadership.
- Emergent behaviours that can be understood as expressions of system capacity building.

This is significant as the study not only presents findings in relation to the particular enactments of leadership, but also in relation to conditions of emergence created by these leadership actions, and the resultant emergent behaviours. This process has resulted in a further development of the conceptual framework synthesised from the literature in Chapter 3, as a response to the unique and contextualised experiences of leaders in the *Leading for Learning Project*.

The following diagram (Figure 6.6) presents the renewed conceptual framework developed throughout this chapter. The framework includes the original conceptual framework, in the centre, that was developed in Chapter 3, (red and blue text), and then moving out from there, the new elements of the conceptual framework identified throughout this chapter (purple, green and orange text). It could be conceived as messy, maybe undefined and ambiguous, but in doing so, it represents the inherent complexity and fluidity of the experiences of leaders; their enactments of leadership (green text), the conditions of emergence enabled by these enactments of leadership (purple text) and the emergent behaviours understood as expressions of system capacity building (orange text). The intention is to invite the reader into the diagram, to make connections and find a pathway through, as a meaning making process that reflects the constant interplay between the actual complexity of the experiences and the social context, and the representation and subsequent understanding, of the experiences and context.

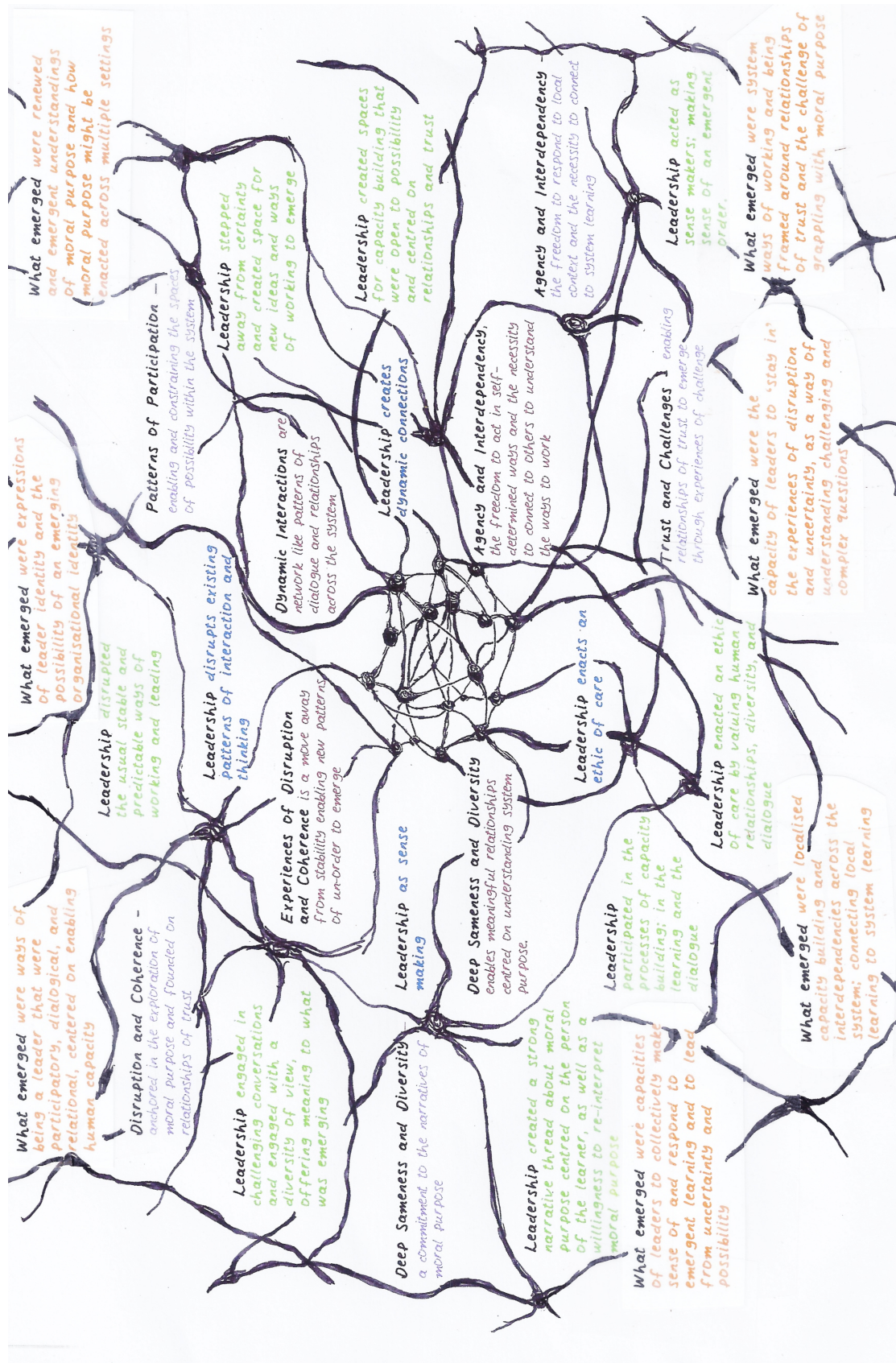


Figure 6.6 Renewed conceptual framework.

6.6 A Response to the Research Question

One of the purposes of this chapter was to interpret the four key findings of the study in relation to the conceptual framework developed from a review of the literature in Chapter 3. In light of this purpose, this section, drawing on the discussion in this chapter and on the renewed conceptual framework presented above, now offers a response to the research question:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

Leaders in one education system developed system capacity to enable the sustained engagement with the moral purpose by demonstrating a commitment to moral purpose, centred on the person of the learner, and an equal commitment to a way of working to enact this purpose. This meant leaders created a strong narrative thread about moral purpose, centred on the person of the learner, as well as a willingness to re-interpret moral purpose. They also enacted an ethic of care by valuing human relationships, diversity, and dialogue.

Leaders in one education system developed system capacity to enable the sustained engagement with the moral purpose by participating in the processes of capacity building. This meant leaders participated in the processes learning and dialogue and thereby acted as sense makers; that is, they were active in making sense of an emergent order.

Leaders in one education system developed system capacity to enable the sustained engagement with the moral purpose by creating spaces for capacity building that were open to possibility and centred on relationships of trust. This meant leaders stepped away from certainty and created spaces for learning, where new ideas and ways of working could emerge. They also attended to the relationships between people in these spaces.

Leaders in one education system developed system capacity to enable the sustained engagement with the moral purpose by disrupting the usual stable and predictable ways of working and leading. This meant leaders created open designs for learning that disrupted the usual stable and predictable ways of working and leading. These were understood as designs for system capacity building. In these learning contexts leaders

participated in challenging conversations and engaged with a diversity of view, offering meaning to what was emerging.

These enactments of leadership enabled *conditions of emergence* understood as necessary in developing system capacity to enable the sustained engagement with the moral purpose in emergent and complex environments.

Leaders in one education system developed system capacity to enable the sustained engagement with the moral purpose by enabling the following conditions of emergence:

The condition of *deep sameness and diversity*, through a commitment to the narratives of moral purpose, as well as an open to these narratives being interrupted by diversity of views.

The condition of *patterns of participation*, where the interactions and relationships within the system, both enabled and constrained the spaces of possibility within the system.

The condition of *trust and challenge*, where relationships of trust emerged through experiences of challenge.

The condition of *agency and interdependency*, where there was the freedom to respond to local contexts, but the necessity to keep connected to learning across the system.

The condition of *disruption and coherence*, where stable and predictable patterns were disrupted, but anchored in the exploration of moral purpose and founded on relationships of trust.

These conditions simultaneously enabled and constrained the emergence of new ideas, new ways of thinking, and new ways of working and being in the system; that is, emergence of the system's capacity was anchored in the exploration of moral purpose, thereby offering the system coherence in complex and emergent environments.

These enactments of leadership identified above, and the concomitant conditions of emergence, created emergent behaviours, understood in this study as embodying new ways of working, new ways of learning, new ways of being, and new ways of thinking in the system. These emergent behaviours can be understood as expressions of system capacity building and are necessary to enable sustained engagement with the moral purpose. These identified expressions of system capacity building are as follows:

- Expressions of leader identity and the possibility of an emerging organisational identity.
- Renewed and emergent understandings of moral purpose and how moral purpose might be enacted across multiple settings.
- System ways of working and being framed around relationships of trust and the challenge of grappling with moral purpose.
- Ways of being a leader that are participatory, dialogical, and relational, centred on enabling human capacity.
- Capacities of leaders to collectively make sense of and respond to emergent learning and to lead from uncertainty and possibility.
- The capacity of leaders to ‘stay in’ the experiences of disruption and uncertainty, as a way of understanding challenging and complex questions.
- Localised capacity building and interdependencies across the system; connecting local learning to system learning.

6.7 Intersecting Narratives

The final section, before presenting the composite vignette and concluding this chapter, brings particular attention to the relationship between the *Leading for Learning Project* and the broader education system. The impetus for the inclusion of this section is the unexpected event of the introduction of the Change2 initiative 18 months into the 3-year project. As has been outlined in Chapter 1, this occurred towards the end of the data gathering stage of the research.

The *Leading for Learning Project* has been described as nested within, and multiply connected to, the broader education system and, therefore, the experiences of leaders, and the context in which they are understood, cannot be confined to the project, but rather need to be understood within the context of the broader system environment. The

conceptual framing of the education system as a complex adaptive system problematised any claim of a bounded project setting in which the experiences of leaders might be understood. As Haggis (2008) and Cilliers (2001) suggest, everything in complex systems is interacting in a dynamic way; there is no simple inside or outside the boundary, rather boundaries are multiple, and constitute the system. The findings of this study confirm this, bringing attention to the experiences leaders had within the project, but also how these experiences ‘intersected’ with aspects of the broader education system. For example, experiences described by leaders as “*gatekeeping*” (Interim finding 3-6) or where aspects of organisational culture “*got in the way*” can be understood as intersections (Interim finding 1-8). At times these intersections illuminated emergent learning and ways of working, at other times they presented significant challenges to system capacity building. Such intersections provided insight into the challenges and possibilities of system capacity building, as they highlighted the characteristics of the broader system, and how these intersected with the embodied ways of working and thinking enacted by leadership in the project.

The intersection that significantly challenged the work of those directly involved in the project was the decision to end the 3-year project after 18 months. This decision was made to accommodate the roll out of a change management initiative across the education system targeting the schools in the *Leading for Learning Project*. In understanding this event in the project, Woermann (2010) makes a point that is important to note; that is, not to see the project as separate from the broader education system in which this decision to end the project was made. Understanding the project as an open and an emergent ecology means it is dynamically connected to the broader education system. To assume that it is closed to the broader system or inclusive of only the relationships within the project would diminish the diversity and connectedness of the project. The project, therefore, is integral to the broader system; it was designed and enacted by leaders within the context of the broader system. However, what this particular event in the *Learning for Learning Project* illuminates is the intersection of the dominant organisational narrative, one that upholds positional power relationships centred on control and management, with the open and dialogical narrative of the project. These narratives had intersected before, as described above, and leaders had been able to create experiences of coherence and go on to sustain the work of the project. However, in relation to this event, the project was not sustained because the connections and relationships within the project were dismantled

and sustainability was compromised (Interim Findings 1-8; 3-6; 3-8). In taking a cue from understandings about complex living systems, Capra (2002) suggests that what sustains living systems in a constant state of transformation is the web like patterns of relationships. This intersection, experienced by leaders in the project, severely fragmented the web like patterns of relationships that had sustained and nurtured a commitment to moral purpose and a way of working in the system.

The change management initiative replacing the *Leading for Learning Project* adopted a prescribed training model for capacity building, delivered to all schools in the project, by education office leaders across the system. Essentially, the dynamic connections and relationships, and the necessary space for emergent possibilities, were diminished. In implementing the new initiative, leaders anticipated creating controlled environments with delineated roles and relationships, thereby upholding patterns of organisational power, but closing down the spaces for deep learning and emergent possibilities (Interim Findings 1-8; 2-3; 3-6; 3-8). While the immediate impact of the decision was reduced time and resources available to the *Leading for Learning Project*, it also diminished opportunities for learning across the system and changed the learning relationships on multiple accounts. As one school leader commented, “*There is a danger – it distracts from this kind of system learning.... there is a real difference between having it done to you and that sense of being involved in the whole process of the project*” (FG 1 p22-3). Leaders in the project recognised the shifting priorities within the system and consequently made choices about their work, “*the team had to make choices about where they needed to be and what they needed to do. I had to make a choice around what I thought was a priority*” (FG 5 p21). This created competition between priorities, as leaders had to claim a position within the education system, demonstrating where they were aligned (Interim Finding 3-9). The experiences of agency and the emergence of interdependent relationships within the system were diminished, as leaders experienced how one part of the system could impose conditions and ways of working on another part of the system and create competitive environments around shifting priorities.

In responding to the research question, *how do leaders in an education system develop system capacity to enable sustained engagement with moral purpose*, this discussion about intersections suggests that if leaders are to sustain their engagement with moral purpose and explore the possibilities of enacting moral purpose, the relationships that

deeply connect leaders to their work, to each other, and to moral purpose, need to be cared for and sustained. The findings of this study suggest that relationships are sustained when they are founded on trust, mutual learning, and respect, thereby creating the space for capacity building and to explore the possibilities of enacting moral purpose in multiple and diverse contexts. These relationships are foundational if leaders are to engage in the complexity and challenge of enabling system capacity building in emergent environments. By discussing this particular intersection within the project, this study brings attention to what happens when a connected ecology, engaged in participatory and dialogical ways of working, embodied in the enactment of leadership, intersects with the dominant organisational narrative that upholds hierarchical relationships and functional structures. It can be suggested that when the dynamic web of human relationships are dismantled and recalibrated along functional lines, the spaces of possibility are contracted and become linear and defined experiences, and thus, the purpose of the work becomes prescribed and narrowly defined. As Gregory Bateson suggests when you “break the pattern that connects.... you necessarily destroy all quality” (van Boeckel, 2011).

6.8 The Stories of Leaders: Pulling Together Multiple Narrative Threads

The final section of this chapter returns to the story of leaders; their experiences of fulfillment, connectedness, challenge, freedom, uncertainty, and disappointment. The vignette invites the reader into the lives of leaders in the *Leading for Learning Project*, to illuminate the unique and contextualised experiences of leaders, and to ensure that the ‘human story’, in all its complexity, anchors the understandings gained from the proceeding interpretative discussion.

Creating... Sustaining...Protecting...Dismantling.... the Spaces of Possibility...

The Leading for Learning Project began with a sense of anticipation and possibility because, unlike other system initiated projects, this project had a ‘whole of system’ focus in that it enabled teams from across the system to work and learn together. As Tanya said, *“I was so excited because I really liked the idea of us all working together and really learning for the system. I was exposed to different perspectives and it was about seeing all the possibilities, having the deep conversations and asking the hard questions - to really explore what it meant to be a Catholic school in a contemporary setting and to actually enact this, not just to pay lip service to this”*.

Such explorations were anchored in a constant expression of moral purpose. *“There is a like-mindedness around our sense of moral purpose”*, says Steven, *“we know why we are setting out to do this...around equity and social justice through education”*. Equally, Liz understood what this meant for students, *“it is around the kind of opportunities that students get, so that they are able to live lives of promise, lives of service, flourishing and meaningful lives in today’s changing world – with all the possibilities that that offers”*. There was a sense from the way leaders experienced the purpose of their work that they were deeply engaged, in what one leader called *“an open narrative – where your story and the systems story - it is constantly evolving as it is interrupted by ideas that are quite different from your own”*. It was this experience of moral purpose that was the anchor, amidst this complex and emergent environment.

The project design was focused on genuine questions of inquiry about how moral purpose might be reinterpreted and enacted across multiple settings within the system. The design was flexible and responsive to the learning that was emerging where, as Liz explains, *“There was a real desire to create a space where people could come into the conversation...to build trust and respect, where they could engage with totally different perspectives”*. This idea of ‘space’ was important and it was often used to describe experiences that were exploratory and relational, where leaders were seeking new ways of working and learning that were beyond what was expected or known. Steven recognised the importance of *“creating opportunities and space for rich and deep dialogue ...where people could genuinely think about new ideas, as well as contest ideas and have a view”*. This was in sharp contrast to the linear and defined experiences of past projects, as Dianne comments this project was a *“move away from the bureaucratic nature of the system where you step through things and don’t get much choice...this was different; it became more freeing... it was coming from, and here are all the possibilities”*. Her colleague Graeme agreed, *“we weren’t having to make something fit us, and it wasn’t about being right or wrong, but what’s best for us, best for our students”*. However this wasn’t something that all leaders immediately understood or were comfortable with, as one leader reflected, *“we were looking to others to lead and provide direction – but I think we were too used to being told and given the answers”*. Such open designs for learning initially resulted in

uncertainty and frustration, however when leaders were able to stay in this space, they recognised that in the confusion was the possibility and freedom to decide what was best for them in their own context. As Troy says, *“once we realised it was about us finding our way, that was when we stepped up and did our best work...we turned it around and the leadership came from our team, seeing the needs of our school and grappling with complex ideas and what they meant in our context”*. The ways of working in the project invited leaders to contest ideas and to have an influence in their setting and beyond; *“it was great”*, said Steven, *“because it was disruptive”*.

Rather than offering certainty and predictability leaders were sharing hunches, exploring ideas, learning from others, being willing to say ‘I don’t know’, asking questions, and engaging with different views. As Liz said, *“It was about putting your ideas out there, not holding back and asking others what they think...and that’s not always easy”*. Leaders acknowledged that this *“felt risky, so to some extent”*, said Steven, *“you had to be comfortable in your own capacity and in your level of not knowing. It was unnerving as well because within the broader culture there is an expectation that leaders need to know and be certain, it’s considered weak leadership if you are not telling - whereas we were saying – you come to the conversation, to listen and to learn from others – that was the leadership”*. It was this kind of leadership that enabled leaders to ‘stay with’ the experiences of uncertainty; they remained connected to each other through the dialogue and were response to what was emerging in their own setting.

Across the education system spaces had been created where new ways of learning, being, and thinking were emerging. Leaders participated in these spaces; they participated in the learning and the dialogue and, as Steven says, *“This is about everybody, it is about being in there with people, you can’t be outside it”*. These spaces were founded on relationships of trust where there was a freedom to explore possibilities, grapple with different perspectives, and generate new ideas. *“There was a really richness in this”*, reflects Cathy, *“I gained from the experiences of others, yet there was great diversity, but we were able to make a whole lot of connections”*. Leaders began to settle into new ways of working, being and learning, spaces for learning opened up, and there was a growing sense of being connected to an emerging

understanding of moral purpose, however “*suddenly*” as Dianne says, “*something can’t happen anymore because of a higher priority!*”

Throughout the duration of the project leaders recognised the times when the relational and dialogical ways of working were in conflict with the organisational culture of hierarchical structures and positional power, prompting leaders like Grace, to wonder “*whether this way of working was valued or understood*”. Grace’s hunch was confirmed when the project came to a premature finish. Leaders expressed their great disappointment, as Tanya said, “*it was terrible; I would say we felt let down and undervalued*”. Dianne agreed, “*the project had suddenly been devalued...There is a danger in this...because a project that involves everyone at a school level loses momentum and value because something else takes over....this distracts from system learning. You could really feel the difference, between being done to – where something comes along that you need to do, compared to being very much part of the whole process and the connections we had with others in this project*”.

The project’s premature end occurred when an externally sourced change management program was introduced for all schools that was intended to direct operational and cultural change more quickly across schools and education office settings. This was the antithesis of the *Leading for Learning Project*. Consequently the connections, the relationships, and the spaces for learning were dismantled and replaced by structurally defined relationships and controlled strategies for implementation. Personally, and professionally, this was a very disappointing experience for many people, as the project had created a space for rich and deep dialogue, had fostered a commitment to learning for all, and a joint responsibility for the learning for all students.

While the project no longer existed in its intended form, Steven’s insights into the genius of change are important as they offer hope in the face of such experiences of destruction:

the change is in the people, and what happens between people, that’s where the new thinking gets generated, that’s where the trust is nurtured, that’s where the reform will come from. It’s like we are seeding through this project

and letting the new ideas emerge.

Seeding through people gives hope, while the project may have finished earlier than expected, people and their ideas, and what happens between people, remained. As one leader reflected: *“I get that feeling that things have been discovered about how we do things that we’re not going to go back”* and another leader, *‘The shift has been in me – in what I know, who I am and what I do. I can no longer be the same person I was before all this learning. I have changed.*

However if these ‘seeds’ of hope are to enable system learning, new connections and relationships need to be nurtured. While this project came to an end, another ‘space’ was being identified, Liz hints at this when she comments, *‘we’ve got another project springing off this, and it’s come from another person, who could see what was happening, I think that means that there is momentum’*. However, as Steven suggests, *‘the challenge remains of how to protect and sustain these kinds of projects within the current dominant organisational culture’*.

6.9 Conclusion

This study explores how leaders in one education system developed system capacity; that is, how they enabled learning, their own learning and the learning of each other, and how this learning might be conceived as system capacity building focused on the sustained engagement with moral purpose. This purpose was achieved by interpreting the experiences of leaders, in respect to each key finding, in relation to the conceptual framework developed in Chapter 3. This resulted in series of insights in relation to each key finding being identified in respect to the following; the enactments of leadership that enabled system capacity building; the conditions of emergence created by these enactments of leadership; and, the emergent behaviours, understood as expressions of system capacity building. This led to a further development of the conceptual framework, in response to the unique and contextualised experiences of leaders, as they participated in a dynamic and emergent environment. These finding and insights are significant; not only does the study identify particular enactments of leadership, but also how these enactments of leadership enabled the necessary conditions for the emergence that gave rise to expressions of emergent behaviour, understood as expressions of system capacity building.

This study, through its engagement with perspectives underpinned by complexity theory, provides insight into the deep ecology of one education system, and how the human capacities within that system might be fully expressed and focused towards enacting moral purpose. This represents a fundamental shift from the mechanistic and regulatory paradigm that has consistently defined the purpose of education systems and the practice of leaders in education systems. In conceptualising education systems as complex adaptive systems, this study has provided alternate ways of thinking, working and being within education systems, that brings attention to the *whole* system and how the enactment of moral purpose is embodied within the whole. This study has illustrated how the enactment of moral purpose is a source of coherence within dynamic environments. Extrapolating on Haggis' (2008) claim that coherence is the existence of the system itself, it can be proposed that moral purpose *is the existence of the system itself*, where the enactment of moral purpose through processes of system capacity building maintains the system as a system.

Chapter 7

Conclusion

This study set out to explore and deeply understand whole of system capacity building, in particular, the purpose of system capacity building, and how leaders in one education system, the CESM, in the context of the *Leading for Learning Project* understand and enable system capacity building. As such, the research question guiding this study is:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

This exploration of system capacity building was guided by the theoretical underpinnings of complexity theory. As such, the thesis offered a conceptualisation of education systems as complex adaptive systems, and system capacity building as a complex and emergent process, providing insight into how leadership is experienced within such complex and emergent environments, and how it is focused on the enactment of moral purpose.

This chapter begins with a summary of the study, reorientating the reader to the significance of the context - the *Leading for Learning Project* - to the purpose of this study, and how it is situated within the relevant literature. The chapter will then present recommendations for practice and go on to outline the contribution this study makes to existing fields of research, as well as recommendations for further research. The chapter will finish with the overall significance of the study and some final concluding remarks.

7.1 Summary of the Study

The *Leading for Learning Project*, a professional learning project offered by the CESM, commenced with a sense of anticipation as it offered an opportunity for leaders across the system to explore a series of questions pertinent to the moral purpose of the education system. The project was focused on deeply understanding and enabling learning that was authentic and cared for the development of the full humanity of the person, recognising the diversity and complexity of contemporary life (Catholic Education Office Melbourne, 2009b; Starratt, 2004). The intention of the project was to develop the capacity of leaders in schools *and* in education offices, through a process of collaborative inquiry, to explore the possibilities of how moral purpose might be enacted across the multiple and

connected contexts of the education system. The *Leading for Learning Project* signaled a move away from the predictable and stable ways of working in the system and the usual pre-determined outcomes of such system projects. It was evident from the experiences of leaders that the project intentions and ways of working challenged some established views about the organisation of the education system, capacity building, and leadership. While the project did not progress to its scheduled completion, the findings of this study provide some important insights into how leaders in the *Leading for Learning Project* enabled system capacity building focused towards sustained engagement with moral purpose, particularly when understood through a complex systems 'lens'.

In summary, it can be suggested that the project created a space for the capacities of leaders to be expressed and enabled, giving rise to a complex, relational, and emergent environment for enabling system capacity building. It was the challenges and possibilities of this 'project experience' that were significant and provided a unique opportunity to explore system capacity building.

Within the broad field of educational research, system capacity building is a significant area of debate and, as highlighted by scholars such as Fullan (2010) and Mourshed et al. (2010), is gaining currency as an essential driver of whole of system improvement. There is agreement amongst scholars, like Harris (2010), Hargreaves and Shirley (2009), and Stoll (2009), that whole of system capacity building has the potential for enabling a collective commitment by all within the system to enhance student learning in its broadest sense. However, the review of the literature identified how the prevailing neoliberal mindset, influential in framing the current education environment, has skewed the focus of system capacity building towards achieving narrowly defined benchmarks of quantifiable system performance, thereby marginalising the possibility of enhanced student learning in its fullest sense (see for example, Hargreaves, 2009b; Harris, 2010; Sergiovanni, 2000; Starratt, 2011). The review of the literature also identified a paucity of research that focused on the *whole* system because the central bureaucracy/education offices were mostly ignored within the broader understanding of whole of system capacity building (Katz et al., 2008; Parr & Timperley, 2010). It is suggested, therefore, that while there is a convergence of scholarly discussion towards the importance of enabling whole of system capacity building, there are limitations in the purpose and scope of system capacity building (Harris, 2010; Stoll, 2009). This study set out to address these

limitations, by engaging with an alternative perspective from the field of complexity research, in particular the field of complex adaptive systems. In taking such a perspective this thesis offers alternative ways of thinking, working, and being in education systems (Jäppinen, 2014; Morrison, 2008). This is significant, as this study has deliberately stepped out of the usual frames of reference, and engaged with an emergent organisational theory as a way of, not only conceptualising education systems and system capacity building, but also as a way of understanding the practical implications of such a conceptualisation.

The conceptualisation of education systems as complex adaptive systems represents a radical reframing of the system, the purpose of the system, and how the work of leaders is conceived in the system (Jäppinen, 2014). As a complex adaptive system, the education system is understood as an open, dynamic, and connected whole constituted of a web of relationships. According to Beabout (2012), Jäppinen (2014) and Gough (2012) this is not a common way of understanding education systems, but it is one that is considered beneficial for exploring the possibilities of enabling the full potential of education systems. From this theoretical stance, for example, it is not possible to partition the system and only understand schools as the system and ignore the central offices and their relationships to the whole (Haggis, 2008). Nor is it possible to marginalise the potential of the system by focusing on narrowly defined purposes but, rather, from the theoretical stance of complexity, a more expansive understanding of purpose is engaged giving full attention to the human capacities and potentials, of both learners and leaders, in enabling system capacity (Kurtz & Snowden, 2003).

In summary, the study takes the view that education systems are inherently complex; that is, they display multiple nonlinear interactions, are unpredictable, capable of emergent behaviour, and that human qualities, such as choice, reflection, and the enactment of particular values belong to the characterisation of the system (Kunneman, 2010). Within these complex environments leadership is understood as emerging from the dynamic processes of human interaction (Goldstein et al., 2010; Lichtenstein & Plowman, 2009). Leaders, therefore, are understood as participating in the system, participating in the dynamic interactions across multiple dimensions of the system. It is this conceptual framing of education systems that provides insight into the experiences of leaders and

how they enacted system capacity building in the context of the *Leading for Learning Project*.

This study was guided by a research design that enabled the experiences of leaders, and the context of these experiences, to be understood as complex; that is, the design acknowledged the dynamically connected and emergent nature of the education system and how meaning emerged from multiple human interactions within the system (Haggis, 2008; Horn, 2008). The ethnographic methodology focused attention on the dynamic interactions of leaders and how they constructed meaning in multiple settings within and beyond the project context (Timmermans & Tavory, 2007), thereby reflecting the diverse and complex understandings of their experiences and enactments of system capacity building (Creswell, 2003). The iterative and detailed thematic analysis process continuously engaged with the experiences of leaders, demonstrating a commitment to exploring the complexities of the context and the multiple perspectives of leaders within the different settings. Throughout the process there was a critical openness to emergent understandings, rather than to complete and defined understandings. Of particular importance to this study was the stance taken with regard to the human person, embedded within the theory of complex adaptive systems and underpinning the research design. Guided by the scholarship of Reason and Bradbury (2008), this stance promotes a view of the human person as deeply connected to the social and ecological “webs of life” and therefore provided this study with a frame of reference for understanding the relational dynamics of the system and how human capacities and potentials can be fully expressed within complex systems. This stance also underpins one of key premises of complex adaptive system, that is, the necessity of participating in the dynamic relations of complex systems as a process of emerging understanding (Byrne, 2005). This synergy presented possibilities for identifying and understanding renewed ways of thinking, learning, and being *with* others and being *within* the system (Byrne, 2010; Heron & Reason, 1997).

The *Leading for Learning Project* was nested within, and multiply connected to, the broader education system. Therefore the experiences of leaders were not restricted to the project nor could they only be understood in relation to the context of the project. The ethnographic methodology ensured an openness to the shifting dynamics of the education system, and a focus on the multiple and connected interactions of leaders within and beyond the project. As a result of understanding the project in this way, and this particular

orientation to understanding the experiences of leaders, it can be suggested that the *Leading for Learning Project* created a ‘space of possibility’ where new ideas, new relationships, and new ways of learning and working were able to emerge. This space can be understood as exploratory and relational, where the capacity of the system emerged and was focused on the enactment of moral purpose. The findings of this study also suggest that such ‘spaces of possibility’ are fragile and vulnerable, particularly when the web of human relationships is damaged and the space for exploration is narrowed. The unexpected finish of the *Leading for Learning Project*, gave sharp focus to how an organisational ecology can be dismantled by actions that uphold the dominant bureaucratic position.

7.2 A New Conceptualisation: *System Capacity for Learning*

The key findings and insights from this study, as outlined in the previous chapter and presented as a response to the research question, provide a new conceptualisation of system capacity building. Given these findings and insights system capacity building can be understood as an emergent process of identity formation; of the individual, the collective, and the system as a whole. When understood as a process of identity formation, system capacity building is focused on enabling the capacities and potential of each person to be fully expressed, and the interdependencies between people to be nurtured and contribute to the capacity of the system as a whole. This means system capacity building is a process of participating in deep learning and dialogue centred on understanding, ‘who we are in this learning and work’ from which emerges, ‘where we are going’. In light of this, the term system capacity *building* is rephrased as a process of system capacity *for learning*, because it brings attention to how people participate in this dynamic of learning. Such participation creates ‘spaces of possibility’ for enabling system capacity for learning, where those in the system are able to engage with diversity of view in expansive contexts that create conditions for learning that are disruptive, but centred in the exploration of moral purpose. While the focus is on the system as a whole, it is a whole with many localised centres, with each centre responsive and attentive to its context, as well as being dynamically interconnected and responsive to the narratives of moral purpose across the whole system. This process of system capacity for learning occurs within an horizon of important questions focused on enacting moral purpose; a moral purpose centred on the person of the learner.

This study provides important findings and insights about the possibilities, challenges, and tensions of enabling system capacity for learning focused on moral purpose, findings and insights that may have gone unnoticed or marginalised if the frames of reference had been taken from the mechanistic and regulatory views found within some of the education reform literature. In light of the findings and insights presented in Chapter 6, four recommendations for practice are now presented.

7.3 Recommendations for Practice

These recommendations for practice are highly integrated and contextual, and are understood as part of the ongoing process of seeking to understand the complexity of human social systems, like organisations. As such, the recommendations for practice assist leaders to reconceptualise education systems as complex adaptive systems, to understand system capacity building as system capacity for learning, and how this might develop the capacity of the system to enable sustained engagement with moral purpose. Thus, the intentions of the recommendations for practice are to enable the emergence of a connected and relational education system ecology, where the capacities of the human person are fully realised and contribute to the emergent capacity of the system (Capra 2002).

These practical recommendations are understood as embodying ways of working, ways of learning, ways of being, and ways of thinking in the system that enable those in the system to be focused on sustained engagement with moral purpose. In making recommendations for practice, the reference to leaders *enabling* an identified practice, needs to be understood as simultaneously as leaders *participating* in the identified practice.

7.3.1 Recommendation 1.

Leaders in education systems need to focus their work on the enactment of moral purpose that is centred on the authentic expression of learner identity/ies.

It is recommended that leaders come to deeply understand and experience moral purpose through engaging with a diversity of view about moral purpose. It is important that moral purpose not be conceived as something fixed or static, but rather as open to interpretation

through the interplay of multiple narratives (traditional, organisational, personal), with the intention of developing emerging and shared understandings of moral purpose.

The work of leaders needs to be focused on genuine questions of inquiry about how moral purpose is reinterpreted and enacted across multiple settings and contexts. Opportunities for dialogue that engage with a diversity of worldview, perspective, and experience are necessary for this work. It can be suggested that leaders *'go where the questions and the learning lead them'*.

Leaders need to acknowledge and hold the tension of these experiences; where the dialogue and the learning is grounded in the narratives of moral purpose, but also open to the possibilities of these narratives through the processes of interpretation. To do this, leaders need to be continually contextualising what *has* happened, what *is* happening, and what *is emerging*, thereby co-creating the narrative about the emerging purpose of their work.

It is recommended that all leaders in the system create a strong narrative thread about the moral purpose of the work centred on understanding, *'who am I in this work'*, *'who are we in this work'*, *'how do we understand our emerging purpose'* and *'how might we give authentic expression to this'* in dynamic and diverse contexts. In this way system capacity for learning is focused on the process of identity formation, of learners and leaders, as well as a process of emerging system identity.

7.3.2 Recommendation 2.

Leaders in education systems need to enable a way of being in the system that is framed around learning, dialogue, and relationships of trust.

It is recommended that all leaders participate in the processes of enabling capacity for learning (capacity building) - in the processes of dialogue and the learning - through practices such as; asking questions, exploring hunches and possibilities, listening, problem solving, responding to feedback, sharing uncertainties and perspectives, and being open to a diversity of views. This means that leaders are actively present to what is

emerging, are participating in experiences of emergence, and thus, developing the capacity to lead from these experiences.

If, however, leaders are unable to participate in these processes of capacity for learning, or choose not to, then a system way of working becomes fragmented, diminishing the opportunities for leaders to learn from each other across multiple and diverse dimensions of the system. It also means that leaders are not present to what is emerging and therefore unable to amplify the learning across the system, or to lead from these experiences of uncertainty and possibility. In these contexts it is difficult to sustain a system way of being that is responsive to emergent learning.

Leaders also need to *pay attention* to what is happening to people, and between people, as they grapple with new and often unexpected ideas about their work. Leaders *pay attention* by: participating in the processes of capacity for learning; experiencing, noticing, and naming, what is happening; as well as, contributing to the collective process of making meaning. This is particularly important when experiences seem confusing or ambiguous for others, in these contexts leaders need to keep the conversations open and make connections to the broader purpose of the work. Such participation fosters the necessary relationships of trust that are foundational if experiences of uncertainty and challenge are to hold the ‘seeds’ of emergence; that is the seeds of new ideas, new ways of working and being in the system that will strengthen the capacity of the system to enact moral purpose. In these settings leaders keep the conversations open with a broad range of people within and beyond their own setting, so that they can understand the often complex and challenging questions that emerge in their setting.

7.3.3 Recommendation 3.

Leaders in education systems need to act as sense makers; making sense *with* others as a way of exploring diverse perspectives and possibilities.

It is recommended that leaders take on the practices described as ‘sense making’ within these complex and emergent environments. This means leaders are collectively making sense of, and responding to, emergent learning and leading from these experiences of uncertainty and possibility. In this way leaders take their cues for leading from their

collective experiences of participation across the system and from seeking what might be possible, rather than a from a predetermined certainty.

As sense makers, leaders are willing to explore their hunches, share their perspectives, and to be comfortable with uncertainty, as well as to lead from these experiences of 'not knowing'. This means leaders need to be prepared to disrupt habitual expectations of leadership, challenging the assumptions about leadership as a position of certainty that offers clear direction, and create alternative experiences of leadership as emerging from collective experiences focused on making sense of an emergent order.

7.3.4 Recommendation 4.

Leaders need to create environments or spaces for capacity building focused on learning for all; that is, spaces for enabling capacity for learning.

It is recommended that leaders deliberately move away from the predictable and stable experiences of working in the system and create designs for enabling system capacity for learning that are focused on questions of inquiry, collaborative ways of working that offer choices, and that engage with a diversity of perspectives. These designs are not constrained by predetermined structures or outcomes, but rather the designs enable an emergent order as leaders take time to explore questions that matter to their learners and leaders; in this way, leaders initiate designs that respond to the learning needs within their context. Leaders need to create multiple and localised spaces for enabling capacity for learning that are interconnected across the system through the processes of learning and dialogue. These interdependencies are centred on the possibilities of exploring system learning, through localised experiences.

Leaders need to create environments or spaces where there is freedom to explore, to question, to take risks, to engage with a diversity of view, to learn from and with each other, and to engage in dialogue that continually reinterprets moral purpose. These environments cultivate nonlinear and dynamic relationships and should not be constrained by traditional organisational structures that can close down such spaces for learning. When relationships are founded on organisational lines, with a focus on administration and functionality, conversations focused on capacity building may be marginalised,

denying leaders the opportunities for robust dialogue around questions of enacting moral purpose. In these restricted environments, the capacity of the person, and the collective capacity of the system may not be fully realised. In such environments it can be difficult to sustain participatory and dialogical ways of leading that deeply connect leaders to their work, to each other, and to moral purpose.

These four recommendations for practice are intended to provide leaders in education systems with ways of understanding their context and their enactments of leadership from the perspective of education systems as complex adaptive systems and capacity building as a complex and emergent process of learning. As such, these leadership practices embody ways of working, ways of learning, ways of being, and thinking in the system that enable system capacity for learning focused on sustained engagement with moral purpose.

7.4 Contributions to Existing Fields of Research

This study has engaged with the fields of educational research, in particular system capacity building, and complexity research, in particular, complex adaptive systems. The contribution this study makes arises from engaging with both fields of research to explore a particular question in an education context. Therefore, this study makes the following contributions to existing fields of research.

The study presents an alternative paradigm by which to understand education systems and the leadership within these systems. This study was able to demonstrate that education systems can be understood as complex adaptive systems, capable of emergent behaviour. This view departs from the mechanistic and regulatory paradigm that consistently defines education systems, and the practices of leaders within those systems (Gough, 2012). Therefore, the findings of this study contribute new knowledge to educational research, offering a new perspective on *whole* of system capacity building and how leaders enable system capacity building within complex and emergent environments. In particular, this new conceptualisation and knowledge was identified through exploring the experiences and practices of leaders, and therefore the findings and practical recommendations provide ways to enact this conceptualisation of education systems as complex adaptive systems. Such a contribution is significant as it address the critique often directed towards

the application of complexity theory to organisational research, as its failure to go beyond the metaphorical discussion and offer any practical implications for leaders within organisations (Goldstein et al., 2010; Horn, 2008; Wheatley, 2006). This study offers clear practical implications for leaders in education systems.

The engagement with the field of complexity research offers new insights into system capacity building and how leaders enable capacity building, within the context of education systems. The study suggests capacity building is a process of emergence, that is, it is a process of system capacity for learning, where new ideas, ways of working, and thinking emerge in the system because of what happens between people in this dynamic of learning. It therefore follows that leaders enable system capacity for learning by participating in the learning, in the process of emergence. In bringing a complexity lens to the exploration of the research question, the study not only identifies how leaders enabled capacity for learning, but also the conditions of emergence created by these enactments of leadership, and the resultant emergent behaviours that were then identified as expressions of system capacity. This is a significant contribution as it provides a new set of critical factors for leadership in education systems to consider in enabling system capacity for learning that is embodied within the complex ecology of the education system.

This study also contributes to the theory of complex adaptive systems by applying the theory to an education system context, resulting in new theoretical insights and new practical applications of the theory. In particular, by focusing on human social systems, this research contributes to the discussion in complexity theory that is interested in moving beyond a general theory of complex systems, to one that reflects the differentiation offered by human capacities and potentials, as characteristic of complex systems (Kunneman, 2010). This study, by focusing on a system with a particular values framework, demonstrates how this was enacted in a dynamic and emergent environment, offering both coherence and disruption, giving rise to an emergent system identity.

This study also reveals the tensions and challenges of sustaining participatory, relational, and dialogical ways of being in an education system, when the dominant organisational narrative values control, function, and efficiency. This study demonstrates, through practical examples, how sustainability can be compromised and what the implications of

this are for enabling system capacity focused on moral purpose. Importantly, the study provides findings and practical recommendations in relation to how an education system ecology, framed around dialogue, learning, and trusting relationships, can be sustained so that the full capacities of the human person can be realised and focused on the enactment of moral purpose. Although it needs to be acknowledged that these insights were illuminated when such ways of being and learning within the system were dismantled, at considerable personal and professional cost to some.

Finally, this study contributes to discussions about the use of methodologies within complexity research. In particular, how dynamic and nonlinear interactions across multiple dimensions of the system are understood, described and presented. In focusing attention on human social systems, this study has given attention to understanding the social context of participants when they are conceived as unbounded, nested, connected, and fluid (Haggis, 2008).

7.5 Recommendations for Future Research

As a result of this study the following three areas have been identified for further research.

First, this research is focused on one education system and one particular project - *Leading for Learning Project* - therefore there is scope for further research that explores the experiences of leaders within other projects and other education systems from the perspective of complex adaptive systems. The conceptual frameworks developed in this research are provisional given our capacities to fully understand complex systems; therefore it is recommended they be used to understand other settings, thereby continuing the process of their development. Such studies would also contribute to the further development or refinement of the findings and recommendations identified in this study. Given few studies have used the theory of complex adaptive systems and applied it to education systems with practical recommendations (Goldspink, 2007a; Jäppinen, 2014), further research needs to be undertaken in this area.

Second, this research identified a synergy between the literature addressing identity in complexity theory and the literature addressing Catholic identity. It was beyond the scope of this research to present the Catholic identity literature (other than briefly in Chapters 1

and 2). One of the contemporary challenges within Catholic education is how the organisation recontextualises its Catholic identity: how it understands the particularity of its narrative within diverse secular and pluralistic contexts (Pollefeyt & Bouwens, 2010). The recent theorising within the field of complexity, drawing on hermeneutics, understands identity formation as relational and mediated through dialogical and narrative encounters within the organisation (Kunneman, 2010). This synergy is unexplored and provides possibilities for understanding Catholic identity within the context of complexity theory.

Finally, this research used a visual method by inviting participants to draw during the interviews however, due to the volume of data, it was only used in a rudimentary and limited way. However, the act of using participant generated drawings within the research process provided evidence of their value in giving expression to the complexity of experiences. There is scope for analysis of the drawings from this research, as well exploring the possibilities of including visual methods within research designs exploring complex phenomena.

7.6 Limitations of the Study

The limitations of the study have been acknowledged throughout this thesis, with consideration given to these in ways that ensure the integrity of the study. The following provides a summary of limitations.

This study is focused on the experiences of leaders in a particular project, in a particular education system and, therefore is limited in scope. It can be legitimately suggested that it is the uniqueness and particularity of the setting that is necessary to understand deeply complex and emergent phenomenon however, as suggested above, it will be important that other such studies be undertaken to add to the depth of scholarship of this work.

The research methodologies selected for this research present some potential limitations. Complexity research is premised on the understanding that complex systems cannot be fully understood, nor can they be defined by analysing one part of the system. Therefore, I was constantly challenged to understand the system as emergent, as a constant interplay of dynamic interactions, and to be open to the ongoing transformation of understandings

that emerged (Preiser & Cilliers, 2010). One way this study has drawn attention to this limitation, is to reiterate the unique and contextualised experiences of leaders, as well as addressing how the findings and conclusions of the study are to be understood in light of this knowledge.

A further limitation of the study is the person of the researcher. It needs to be acknowledged that my actions as researcher reflect my biases, perceptions, and worldviews. This acknowledgement is done with the understanding that personal stance is an affordance to the research endeavour not a hindrance. Such a position is possible when the researcher engages in a continuous process of self-reflection, is critically open to diversity of view, and uses an iterative analysis process that continually engages with the voice of the participants (Etherington, 2007; Heron & Reason, 1997; Kawulich, 2005). This process is outlined in Chapter 4 and 5 of this thesis, with intention, throughout this process, to deeply understand my influence as the researcher and not to deny my influence.

This limitation is important to recognise given the researcher as participant stance I adopted, recognising also my role as co-leader in the project and that many of the participants were known to me. While this closeness to the context and participants can be conceived as a limitation, it can also be understood as enriching the research endeavour. Processes to ensure the trustworthiness or goodness of the research endeavour were consistently undertaken (Tobin & Begley, 2004). Such processes were documented in Chapter 4 of this thesis.

7.7 Significance of the Research

Given the findings of this study and the contributions this study makes to existing fields of research, this study is significant for the following reasons.

First, this research offers a conceptualisation of education systems as complex adaptive systems bringing attention to the complex and emergent process of system capacity for learning. This is new territory for understanding education systems, as it shifts the focus from understanding the system as complicated, predictable, and stable, to a focus on the system as complex, unpredictable, and emergent. This research therefore, provides a

contemporary and emerging construct for exploring how leaders enable system capacity for learning. The study identifies findings and insights in relation to: a) leadership practices, b) the conditions of emergence enabled by these leadership practices, and c) the resultant emergent behaviours understood as expressions of system capacity building. This is a significant contribution, and by offering findings and insights across these three dimensions this study offers an expanded understanding of leadership within complex systems, like education systems.

Second, the study identifies how the field of complexity theory is a useful theoretical frame for understanding organisations, however, as Jäppinen (2014) suggests it has seldom been used in the field of education and, therefore, education has rarely benefited from this theoretical frame. This research, through its engagement with the theory of complexity, has demonstrated particular conditions that enable emergent self-organisation within organisations and how leadership practices enable these conditions. It is the resultant renewed conceptual framework, developed in the discussion chapter, that offers an alternative insight into how leadership enacts system capacity for learning to enable sustained engagement with moral purpose. This renewed conceptual framework, developed in this study, is available for others to consider in their own explorations of complex and emergent systems.

Finally, the review of the literature, focused on system capacity building within education contexts, identified a paucity of literature that gave attention to *whole* of system capacity building; limited attention is given to the education offices or the central bureaucracy of the education system and how they might participate in system capacity building (Katz et al., 2008; Stoll et al., 2006). Chapter 2 - Part 2 of the literature review provided a conceptual framing of whole of system capacity building, identifying the challenges and possibilities of a whole of system focus, and signaling some important considerations for leaders within education systems. This study by engaging with the theoretical underpinnings of complexity theory, offers alternative perspectives, to that which is presented in the education literature, on how system capacity building is understood and enacted by leadership. Furthermore, such alternative perspectives have been evidenced through practical application, providing insight into the possibilities and challenges of enabling whole of system capacity for learning focused on the enactment of moral purpose.

7.8 Conclusion

The research question guiding this study is as follows:

How do leaders in an education system develop system capacity to enable sustained engagement with moral purpose?

This question has been explored through the conceptualisation of education systems as complex adaptive systems. As human social systems education systems are constituted of complex networks of relationships that are multiply nested within, as well as constituting, the whole 'living system'. It is these dynamic and emergent networks that sustain the life of the system. As Capra (2002) comments "The network is a pattern that is common to all life. Wherever we see life we see networks" (p. 9). Conceptualising education systems as complex adaptive systems offers new language and new meaning, and the cognitive space to explore the possibilities of an alternative conceptualisation of education systems. This exploration offers insight into the deep ecology of the education system and how those that 'live' in the system create this ecology: an ecology that is characterised by a web of relationships nurtured through deep experiences, deep questions, and a deep commitment to a shared moral purpose (Harding, 1997).

This study illustrates how such an organisational ecology brings particular attention to the human person and how his/her capacities and potential within the system can be fully expressed, and thereby contribute to, the emergent capacity of the organisation. The *Leading for Learning Project*, as a human social system, was sustained by the participation of leaders in the dynamic networks of relationships. In this way leaders were participating in the emergence of the system: in the continuous search for '*who we are*', and '*how we might give authentic expression to this*', as leaders and as a system. These patterns of participation, created by leaders across the system, gave rise to expanded spaces of possibility – spaces for enabling capacity for learning - within the system; exploratory, relational spaces, of generative and undefined possibility. This dynamic ecology, both enabled and constrained by these patterns of participation, nurtured the seeds of emergence; new ways of thinking, working, learning, and being within an education system, focused on sustained engagement with moral purpose.

A critique or limitation often directed towards the application of complexity theory to

organisational research is its failure to go beyond the metaphorical discussion and to offer any practical implications for leaders within organisations (Goldstein et al., 2010; Horn, 2008; Wheatley, 2006). The significance of this study is that it offers findings and recommendations for practice that have implications for how leaders enable system capacity for learning that are grounded in the conceptualisation of education systems as complex adaptive systems. Importantly, these findings and recommendations for practice offer an alternative understanding of education systems, capacity building and leadership that transcends the dominant and pervasive structures and mindsets of education reform. The findings and conclusions of this study give attention to the capacities of the human person, the relationships within the system, and how these enable a dynamic, integrated, and emergent organisation that is focused on the enactment of moral purpose (Capra, 2002; Wheatley, 2006).

As illustrated by this study, participatory and dialogical ways of being in the system can be difficult to sustain in such regulatory environments. As Gregory Bateson (van Boeckel, 2011) wonders, “What is it about our way of perceiving that makes us not see the delicate interdependencies in the ecological system, that give it its integrity?” (para. 3). This study has identified ways to sustain these delicate, yet powerful, interdependencies within the ecology of the education system, as well as ways to disrupt the usual frames of perception by which the education systems are understood. This is founded, not only on the theoretical possibility of this but also, importantly, on the experiences of leaders within the *Leading for Learning Project*. The leaders in this study perceived, experienced, enacted, and sustained a delicate living systems ecology. It is fitting, therefore, to finish with one leaders expression of this ‘lived experience’ of leadership within the context of the ecology of the project.

‘...it’s like bone marrow....it’s that fibrous nature where the ideas – it’s within the fibrous connection where everything’s being generated....there’s lots of bone marrow that’s rich and organic and growing. Feeding and nourishing the life of the project... each of us creates a thread, so the way I construe what we’ve been doing is that when we’ve sat around the table, we’ve brought threads to this fibrous mass and if it’s this organic fibrous mass like bone – the leadership marrow- then your bone marrow is alive...everything flows out of there – each of us contributes different threads- we [draw on] that marrow. This enables me to have new thread to contribute new lifeblood for someone else- so that is

leadership marrow – it's a dialogue, through commitment to the moral purpose.
(Int 3 p. 39)

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Appendices

Appendix A: Leading for Learning Project Membership

Project structure	Members of the project	Description
Steering Committee	<p>One Steering Committee with 6 members with management positions within the CEOM.</p> <ul style="list-style-type: none"> - 2 Managers from the central office location - 4 Managers from regional office locations 	The steering committee was engaged in the management of the project, developing its parameters and general focus. They received information about the progress of the project and were invited to participate in various ways.
<p>Project Leaders Team</p> <p>* Researcher is a member of this group</p>	<p>There is one Project Leaders Team with 11 members, 3 from the central office location and 8 from the regional office locations of the CEOM.</p> <p>The team consists of leaders from the Learning and Teaching group and the Religious Education group.</p> <p>Within the team there are 3 overall leaders in co-leadership roles.</p>	<p>This team is responsible for the ongoing design and implementation of the project with a focus on learning and capacity building in three contexts: Project Leaders Team; Regional Project Teams; and, School Teams.</p> <p>3 co-leaders meet with 2 members of the Steering Committee on a scheduled basis- this forms the Core Team (a group developed after the project began)</p>
Regional Project Teams	<p>There are four Regional Project Teams with up to 7 members each, from the Learning and Teaching and the Religious Education groups. The Regional Manager (from the Steering Committee) has an opportunity to be part of this team.</p> <p>Across the four Regional Project Teams there are up to 28 members in total.</p>	The Regional Project Teams are located across the four regions. 2 members of the Regional Project Team are also members of the Project Leaders Team. The Regional Project Teams design and implement the project in response to their school's needs.
Regional Networks	<p>There are Four Regional Networks. Each network consists of between 5-18 school teams. They gathered as Regional Networks on at least 4 occasions over the year. Online facilities were also used for collaboration.</p>	Each Regional Project Team works with one Regional Network. Each Regional Network was structured differently to meet the needs of schools in the region.
School Teams	<p>Approximately 55 school teams across the four Regional Networks were involved in the project. A school team consists of three to four members.</p>	The school team initiates and leads the school-based inquiry. Team members include: the Principal; and, other leaders within the school (e.g. Learning Leader, Religious Education Leader, Teacher Leader).

Appendix B (a) – (e): Participant Sampling and Rationale

B (a) Criteria for Selecting a Purposeful Sample

Criteria Number	Criteria
1	The participant has been directly involved in the project <i>Leading for Learning</i> , for at least 12 months. This ensures a significant level of familiarity and experience.
2	The overall sample of participants reflects a vertical cross section of the project; that is, the sample includes members from the Steering Committee, Project Leaders Team, Regional Teams, Regional Networks, and School Teams. This will allow for exploration of relationships across levels.
3	The overall sample includes members from across the lateral layers within the project; that is, the sample includes members from across the school teams and across the Regional Project Teams, for example. This will allow for exploration of relationships within project layers.

B (b) Participant Sample and Completion of Online Survey

Project structure	Participants invited to complete the online survey	Completed surveys
Steering Committee	2 participants	0 responses
Project Leaders Team	7 participants	3 responses *
Regional Project Teams	9 participants	9 responses*
Regional Networks	68 participants (22 school teams)	3 individual responses
School Teams	Included in the regional network sample above	

*Table Note: * Some participants in these teams belonged to both groups and while they may have been invited as members of the Project Leaders Team, they may have indicated they belonged to the Regional Project Team.*

B (c) Sample, Settings, and Rationale for Participant Observations

Project structure	Sample and the setting	Rationale
Project Leaders Team	2 sessions 5-7 participants Project design and professional learning sessions.	Two spaced sessions provided diversity of experiences to be explored
Regional Project Teams	1 session 5 participants Project design meeting	The participant observation session occurred in one region. Time didn't permit for a second session in the other selected region. Attention was given to the experiences of this other region through the focus group.
Regional Networks	2 sessions 1 session in each of the 2 selected regions. Regional Network: focus on evidence of learning (leaders, teachers, and students)	One session included 5 school teams and the other session 17 schools. Provided two different contexts and different project designs.
School Teams	No sessions conducted	The selected schools (for the focus groups) were present at the Regional Network session described above.

B (d) Sample and Rationale for Focus Group Interviews

Project structure	Sample of participants	Rationale
Steering Committee	One focus group 3 participants	While the participants had common membership to the Steering Committee they worked in different regional locations. They reflected a layer of the project, but with diverse experiences and from different settings.
Project Leaders Team	One focus group 4 participants	Participants had a common membership to the Project Leaders Team, but they were also members of the Regional Project Teams. They worked in multiple project contexts, therefore reflected diverse experiences.
Regional Project Teams	One focus group 3 participants	Participants worked in a common regional location, but had different roles within the project. They also came from different areas of expertise – the Learning and Teaching Group and Religious Education Group.
Regional Networks	0 focus groups	Focus groups were planned for the Regional Networks. They did not proceed, as it was going to be disruptive and could not be accommodated within the designs of the days.
School Teams	Three focus groups (4,5,5) 14 participants	An additional focus group was conducted due to no focus group being held within the Regional Network context. The three school teams were across two regions. The school teams included the Principal, Religious Education Leader, Learning and Teaching Leader, and Classroom Teacher Leaders in all contexts. These schools had continuity of membership across the duration of the project.

B (e) Sample and Rationale for One to One Interviews

Project structure	Sample of participants	Rationale
Steering Committee	Two interviews	Participants had common membership to the Steering Committee, but were also part of other project teams, as well as working in different locations. They had continuous experience of the project since implementation, offering depth of experience over time.
Project Leaders Team	Three interviews	All participants had common membership to the Project Leaders Team, but were also members of other project teams from different physical locations. Participants reflected different roles and experiences (from within the Learning and Teaching Group and the Religious Education Group), offering a diversity of perspective.
Regional Project Teams	Two interviews	Participants were from different regional locations, with different roles within the regional project team. These participants were not part of the Project Leaders Group and therefore offered perspectives gained from regional experiences.

Appendix C: Sample Letter – Invitation to Participate



An Invitation to Participate in the following Study:

Title of the Study: System Capacity Building: An exploration of the experiences of system leaders in the context of the project *Leading for Contemporary Learning Catholic Schools*.

Principal Supervisor: Associate Professor Michael Bezzina

Student Researcher: Jayne-Louise Collins

Programme: Doctor of Education

Dear [Participant],

As you maybe aware I am undertaking a study at Australian Catholic University with a focus on system capacity building. The project *Leading for Contemporary Learning in Catholic Schools*, which you would be familiar with, provides an interesting context in which to explore this focus. As someone who is a member of this project I would like to extend an invitation to you to participate in this research study.

In order to explore the experiences of system leaders in the context of this project I am going to use a range of ways to gather information. I would like to invite you to participate in a **focus group interview** and also allow me to **observe** you in the course of your work related to the project. I anticipate the focus group will take about 40 minutes and will occur during a designated work time when your group already meets about the project. The observations will be on days when you are already working on the project. The days selected for these sessions are x and x and I will be engaging in the observations during the time already allocated for these sessions. When I'm with your group I will spend some time observing the group and I may also engage in some discussions with you and your group members during the session. At times I may also engage in the work of your group as part of my regular work as a project member.

Studies of this nature are generally positive experiences for participants, however if you feel uncomfortable or anxious about participating you are free to decline at any stage. This may include declining to respond to particular questions or invitations made by me. You do not need to provide any reason for this decision.

In accepting the invitation to participate I would hope that you would benefit from the opportunity to reflect and discuss in depth areas of interest related to your work, and to develop further knowledge and insight about your work.

I am expecting that one of the outcomes of the study will be an in-depth understanding of how education systems, through the work of system leaders, develop system capacity. Once the research is completed you will be provided with a summary of the research findings. The full research results will be published as a thesis document and will also be provided to the Catholic Education Office Melbourne. The research may also be published in another form or communicated to a wider audience.

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CRICOS registered provider:
00004G, 00112C, 00873F, 00885B

It is important for you to know that all information gained during the study will be confidential and will only be used for the purpose of the research. As a participant, your name, address, work location, gender or age will not be used in any documentation or audio recordings generated by the research. Once audio recordings have been transcribed, the recordings will be erased from the recording device. I will use codes when working with the data or creating any documentation. All original data generated from the research will be securely stored within the university research unit during the study and for 5 years after completion of the research. After this time the data will be destroyed in accordance with University procedure.

If as a participant you have any questions about the study in general or about particular procedures within the study, you can contact the Principal Supervisor and me at any time.

Principal Supervisor: Associate Professor Michael Bezzina

Telephone Number: (02) 97014357

School: Centre for Creative and Authentic Leadership

Campus Address: 25A Barker Road, Strathfield NSW 2135

Student Researcher: Jayne-Louise Collins

Telephone Number: 0408 337 241

The Human Ethics Committee of Australian Catholic University has approved this study. Approval has also been given by the Catholic Education Office Melbourne to conduct this research.

If during the course of the study you have a complaint or concern, or have an query that the Principal Supervisor or Research Student has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee.

Chair, HREC

C/- Research Services

Australian Catholic University

Melbourne Campus

Locked Bag 4115

FITZROY VIC 3065

Tel: 99533158

Fax: 99533315

Any complaint or concern will be treated in confidence and fully investigated. As a participant you will be informed of the outcome.

If you agree to participate in this study, you are invited to sign both copies of the enclosed Consent Form. Retain one copy for your records and return the other signed copy to the Principal Supervisor or Student Researcher.

Yours Sincerely

Jayne-Louise Collins

Appendix D: Sample Consent Form for Participants

Appendix D – Sample Consent Form



Consent Form

(Copy for the Participant)

Title of the Study - System Capacity Building: An exploration of the experiences of system leaders in the context of the project *Leading for Contemporary Learning Catholic Schools*.

Principal Supervisor: Associate Professor Michael Bezzina

Student Researcher: Jayne-Louise Collins

I.....(the participant) have read and understood the information provided to me in the Letter to Participants. Any questions I have asked have been answered to my satisfaction.

I agree to participate in an **interview** that includes an invitation to draw. I understand that the interview will take approximately 90 minutes and occur at a mutually agreed time. I also understand that the discussion will be digitally recorded.

I agree to participate in the **online survey**. I understand that the **online survey** will be sent to my work email address, that I am providing to you.

Work email address

I realize that I can withdraw my consent at any time without any consequences and that no reason is required to be provided. I agree that the research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

Would like a *Summary of Findings* document to be sent via email at the conclusion of the study.

Yes/No

The return email address for this consent form is jcollins@ceomelb.catholic .edu.au

The consent form needs to be returned no later than xx.

Name of the Participant:

Signature:

Date:

Signature of Principal Supervisor:

Date:

Signature of Student Researcher:

Date:

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Appendix E: Online Survey Questions

Qualtrics Survey Software

<https://new.qualtrics.com/ControlPanel/PopUp.php?PopType...>

Default Question Block

Q1.

Leadership for Contemporary Learning in Catholic Schools: Research Survey

Thank you for accepting the invitation to complete the online survey.

This survey is one of the ways being used to gather information for the research I am undertaking. The focus of the research is system capacity building in the context of the project **Leading for Contemporary Learning in Catholic Schools**. The purpose of this survey is to understand your experiences as a system leader within this project.

As a project member you will be familiar with one of the broad intentions of the project, which is to further develop the capacity of leaders to lead learning. The survey questions are designed with this intention in mind.

Before beginning the survey some terms will be defined to assist you in completing the survey.

Project Team: your project team is the group of people you work with when you are engaged in the work of the project. Your project team might be your School Team, your Regional Project Team, the Project Management Team or the Steering Committee. You might belong to more than one project team.

System: the system is the Catholic Education System in the Archdiocese of Melbourne. The system includes all schools, the people who work in the Catholic Education, Regional offices and the people who work in the Catholic Education, central Melbourne office.

CEOM: The CEOM is the Catholic Education Office Melbourne and refers to those people who work in the Regional offices and those people who work in the central Melbourne office.

System Leaders: System leaders include school leaders and leaders within the Catholic Education Office Melbourne. In the context of the project Leading for Contemporary Learning in Catholic Schools, system leaders are all members of the School Teams and all members of the Steering Committee, Project Management Team and Regional Project Teams.

Capacity Building: Capacity building in the context of this study is defined as the behaviours that enable the potential of individuals, of groups and of the system to emerge and to be focused towards actions that create a deep and sustained culture of learning for all.
(This explanation of terms was also attached as a word document with introductory email)

Please indicate which **Project Team/s you belong to** within the structure of the project Leading for Contemporary Learning in Catholic Schools

(If you are in more than one team please indicate this)

- Project Steering Committee
- Project Management Team
- Regional Project Team
- Regional Network
- School Team

Q2.

Just a reminder that when this survey refers to **capacity building** it means the behaviors that enable the potential of individuals, of groups and of the system to emerge and to be focused towards actions that create a deep and sustained culture of learning for all. As you respond to the questions in this survey keep this definition in mind.

To what extent has the project Leading for Contemporary Learning in Catholic Schools **provided opportunities for you to build your capacity to lead learning?**

- Never Rarely Sometimes Most of the Time Always
-

Q3. What were some of these experiences that the project provided to **build your capacity to lead learning**?

Enter the experiences below in the left hand column.

Rate the influence of each of these experiences on building your capacity to lead learning

	no influence	limited influence	some influence	great influence
Experience <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4.

What do you see as evidence of how these experiences influenced your capacity to lead learning?

Q5. As a system leader **what have you been able to do to build the capacity of others** to lead learning?

Enter your actions below in the left hand column

Rate the influence of each of these actions on building the capacity of others leading the learning

	no influence	limited influence	some influence	a lot of influence	great influence
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6.

What do you see as evidence of how your actions influenced the capacity of others to lead learning?

Q7. In the project Leading for Contemporary Learning in Catholic Schools, what aspects of the **organisation of the project** have guided the way system leaders have participated in the project?

Q8.

To what extent has the organisation of the project **connected you to the learning of others** within your team?

- Never
 Rarely
 Sometimes
 Most of the Time
 Always

Q9.

To what extent has the organisation of the project **connected you to the learning of other participants across the system?**

- Never Rarely Sometimes Most of the Time Always

Q10.

As a system leader **how have you been able to create connections within the project?**

Enter your actions below in the left hand column

Rate the influence of each of these actions on the capacity of system leaders to learn from each other

	no influence	limited influence	some influence	a lot of influence	great influence
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11.

What do you see as evidence of how these actions influenced the capacity of system leaders to learn from each other

Q12.

What have been the foci of the **professional conversations** within the project?

Q13. To what extent have these professional conversations influenced the direction of the project?

- Never Rarely Sometimes Most of the Time Always

Q14.

As a system leader what have you been able to do to **influence the direction of the project?**

Enter your actions below in the left hand column

Rate the influence each of these actions had on the direction of the project.

	no influence	limited influence	some influence	a lot of influence	great influence
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15. What do you see as evidence of how your actions influenced the direction of the project?

Q16. What do you understand as the **purpose of the project** Leading for Contemporary Learning in Catholic Schools?

Q17. To what extent do you think there is a **shared understanding of the purpose** of the project among stakeholders?

- Poor Fair Good Very Good Excellent
-

Q18. What would be the most commonly held sense of the purpose of the project Leading for Contemporary Learning in Catholic Schools?

Q19. As a system leader how have **you been able to contribute to the development of a shared sense of purpose?**

Enter your actions below in the left hand column

Rate the influence of each of these actions in developing a shared purpose

	no influence	limited influence	some influence	a lot of influence	great influence
Action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Action	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20. What do you see as evidence of how a sense of shared purpose among system leaders enabled capacity to lead learning within the project?

Q21. These questions ask you to consider the influence of leadership experiences on your your capacity to lead learning

Identify your **key experiences of leadership enacted by others** in the project that positively influenced your capacity to lead learning.

For each experience you have named, identify the system leader/s who were key to this experience. Identify the system leaders by their role and their project team. (Do not use names)

	Role of the System Leader (e.g. Manager, Education Officer, School Adviser Learning & Teaching, School Adviser Religious Education, School Principal, Teacher Leader...)	Project Team (e.g. Steering Committee, Project Management Team, Regional Project Team, Regional Network, School Team)
Key Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Key Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Key Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Key Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>

Q22. To what extent did these experiences positively influence your capacity to lead learning

- Never
 Rarely
 Sometimes
 Most of the Time
 Always

Q23. How did these experiences positively influence your capacity to lead learning?

Q24.

These questions ask you to consider the influence of leadership experiences on your project team.

Identify the **key experiences of leadership enacted by others** in the project that positively influenced the **collective capacity** of your project team to lead learning.

For each experience of leadership you have named, identify the system leader/s who were key to this experience. Identify the system leader/s by their role and the project team they belong to (Do not use names.)

	Role of the System Leader (e.g. Manager, Education Officer, School Adviser Learning & Teaching, School Adviser Religious Education, School Principal, Teacher Leader...)	Project Team (e.g. Steering Committee, Project Management Team, Regional Project Team, Regional Network, School Team)
Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>
Experience of Leadership <input type="text"/>	<input type="text"/>	<input type="text"/>

Q25. To what extent did these experiences positively influence the collective capacity of your project team to lead learning

- Never
 Rarely
 Sometimes
 Most of the Time
 Always

Q26. How did these experiences positively influence the collective capacity of your project team to lead learning?

Q27. In the introduction to the survey, the **system** was defined as the Catholic Education System in the Archdiocese of Melbourne. In the context of this study, the system includes all schools, the people who work in the Catholic Education Regional offices and the people who work in the Catholic Education central Melbourne office. Therefore the **system is the collective of all the different groups and people** within the system and includes what **happens between these groups and people**. As you respond to the questions in this section keep this definition in mind.

These questions ask you to consider the influence of leadership experiences on the system as a whole.

Identify the **key experiences of leadership enacted by others** in the project that positively influenced the **collective capacity of those within the system** to lead learning

For each experience of leadership you have named, identify the system leader/s who were key to this experience. Identify the system leader/s by their role and the project team they belong to (Do not use names.)

	Role of the System Leader (e.g. Manager, Education Officer, School Adviser Learning & Teaching, School Adviser Religious Education, School Principal, Teacher Leader...)	Project Team (e.g. Steering Committee, Project Management Team, Regional Project Team, Regional Network, School Team)
Experience of Leadership	<input type="text"/>	<input type="text"/>
Experience of Leadership	<input type="text"/>	<input type="text"/>
Experience of Leadership	<input type="text"/>	<input type="text"/>
Experience of Leadership	<input type="text"/>	<input type="text"/>

Q28. To what extent did these experiences positively influence the collective capacity of those within the system to lead learning

- Never
 Rarely
 Sometimes
 Most of the Time
 Always

Q29. How did you perceive these experiences to positively influence the collective capacity of those within the system to lead learning?

Q30. These questions ask you to consider the influence of leadership experiences that had the effect of diminishing capacity to lead learning.

Identify the **key experiences of leadership** enacted by others in the project that had the effect of **diminishing your capacity** to lead the learning of others.

To what extent did these experiences diminish your capacity to lead the learning of others.

	Never	Rarely	Sometimes	Most of the Time	Always
Experience of Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31. How did these experiences diminish your capacity to lead learning?

Q32. Identify the key leadership experiences enacted by others in the project that had the effect of diminishing the collective capacity of your project team to lead the learning of others.

To what extent did these experiences diminish the collective capacity of your project team to lead learning

	Never	Rarely	Sometimes	Most of the Time	Always
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q33. How did these experiences diminish the collective capacity of your team to lead the learning of others?

Q34. Identify the key experiences of leadership enacted by others in the project that had the effect of diminishing the collective capacity of those within the system to lead learning

To what extent did these experiences diminish the collective capacity of those within the system to lead learning.

	Never	Rarely	Sometimes	Most of the Time	Always
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Experience of Leadership <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q35. How did you perceive these experiences to diminish the collective capacity of those within the system to lead learning?

Appendix F: Script for Conducting the Focus Group Interviews

Thank you for **making this time available** to participate in a focus group interview about your experiences as a leader in the project *Leading for Contemporary Learning in Catholic Schools*.

The focus group should take approximately 60 minutes, with our discussion being recorded. As was mentioned in the Information Letter, participation is voluntary, so at any time you are free not to engage with particular questions that are asked of the group. I also want to remind you that **any information gathered during the focus group interview is confidential** and will only be **used for the purpose of the research**, and that **no personal information will be recorded or included as part of this interview process or at any stage after this**.

The Purpose of the Focus Group Interviews

The purpose of the focus group interview is to **collectively engage in a discussion about your experiences** of the project *Leading for Contemporary Learning in Catholic Schools*. These experiences can be drawn from your work with your Regional Project Team or the Project Leaders Team or from your work in the Steering Committee. Some of you may have also participated in the Regional School Clusters or Networks.

You would have received some information prior to today that outlined some areas that I am interested in exploring with you about your work. (Refer to the *Focus Group Guide* sent to participants)

As the guide indicates I am interested in exploring with you your experience of working and learning within the project. I am particularly interested in understanding how the work of leaders, across a project such as this one, develops the system's capacity to focus deep and sustained learning for students.

Therefore I am interested in how engagement in the project enabled your capacity to lead for learning, enabled your team's capacity to lead learning and collectively the system to lead learning.

As the *Focus Group Guide* indicates I am going to invite you to choose a metaphor that best captures your experiences of working and learning in the project

Are people ready to share their metaphor or would you like a couple of minutes to reflect on this?

Process for the Focus Group Interviews:

1. Each participant is invited to share his or her metaphor while others in the group listen. As you are listening you might like to note ideas that resonate with you or ideas that are different to your experience.

If needed the researcher will use the following prompts after each participant has shared their metaphor to reveal further thinking

Why did you decide on this metaphor?

You mentioned the characteristic... as part of your metaphor description how is that characteristic part of your experience of the project?

Can you explain further what you mean by.....

What are the limitations of this metaphor in capturing your experience?

2. Now that we have listened to each other's metaphors, I am going to invite you to consider the following questions. [Each question is posed followed by a discussion]

2a. Given the descriptions of the metaphors that you have heard what insights do you have about the group's perceptions in relation to the following:

- The processes that **enabled** capacity building – for individuals, teams, for the system?
- The processes that **diminished** capacity building - for individuals, teams, for the system?
- **How leadership was enacted** in the project and what this enabled for you, the group and the system?

- How was a **whole of system responsibility for student learning** enacted within the project?
- How was a **focus on student learning** was maintained at the different layers of the project?
- What were the challenges or disruptions experienced in the project? What influence do these have?

3. What is your experience of the being connected to the whole system through this project or part of a collective system effort in enabling capacity building focused on progressing student learning?

Prompts that may be useful:

Can you say more about that?

Can you explain what you mean by...?

What makes you say that?

How does this relate to what...said about...?

Can you give an example?

Appendix G: Script for the Interview Process and Invitation to Draw

Thank you for making this time available to be interviewed about your experiences as a leader in the project *Leading for Contemporary Learning in Catholic Schools*. The interview is designed to provide you with an opportunity to talk about your experiences within the project. During the interview I will ask you to reflect on your experience as a leader, by this I mean to provide examples or anecdotes from your day-to-day experience as a leader within the project. Can I also remind you that when you do this not to use people's names, but rather refer to them by their role or team.

The interview should take no more than 40 minutes, with our discussion being recorded. As was mentioned in the Information Letter, towards the end of the interview you will be invited to create a drawing or diagram. Like the rest of this interview, this is purely voluntary, so at that point you may opt not to engage without having to give reasons. I also want to remind you that any information gathered during the interview is confidential and will only be used for the purpose of the research, and that no personal information will be recorded or included as part of this interview process or at any stage after the interview. And of course at any time you are free to decline to respond to any of the questions as we move through the interview.

Part 1 Guide for the Interview Process

Question 1:

As you would be aware one of the intentions of the project is to build the capacity of leaders to lead learning. As a leader what kinds of experiences have you had in the project that has enabled your capacity to lead learning?

Prompts

You mentionedas an important experience for you, can you elaborate on this, reflecting on a particular time this happened.

- ⇒ Who initiated the experience?
- ⇒ What happened during this experience?
- ⇒ How did you feel about this experience?
- ⇒ What kinds of interactions occurred during this experience?

- ⇒ What kind of conversations happened as part of this experience?
- ⇒ Why was this experience important to you in enabling your capacity to lead learning?

Question 2:

As a leader and a member of the.....project team, what experiences have you been able to provide that have influenced the capacity of others?

Prompts

You mentioned as an important experience that you have provided for others in your team. Can you tell me more about this experience?

- ⇒ Why did you provide this experience?
- ⇒ How was the experience initiated?
- ⇒ What did you do?
- ⇒ How did you interact with others in this experience?
- ⇒ What kinds of conversations happened during this experience?
- ⇒ How would you describe the influence of this experience on others?
- ⇒ How did the experience influence you?

Question 3:

You have identified some experiences that have been important to you, and some experiences that have been important to your project team, in enabling capacity to lead learning.

I am now going to ask you to reflect on the system as a whole. As you would know the project involves people from schools, regional CEOM people and people from the central office of the CEOM, giving the project a whole system focus.

Can I ask you to begin by reflecting on your experiences of interacting with these different groups within the system?

What is your experience of interacting with the different groups within the project?

Prompts

You mentionedas an important experience of interacting with the different groups within the project. Can you tell me more about this experience?

- ⇒ Which groups are you interacting with?
- ⇒ How are these interactions between you and the different groups initiated?
- ⇒ What is the influence of these interactions?
- ⇒ What are the foci of the professional conversations between you and the members of the different groups?
- ⇒ What have you and the members of the different groups learned from each other through these interactions?
- ⇒ What is the influence of this learning on the different groups who are interacting?
- ⇒ What do you see as evidence of building the collective capacity of those within these different groups to lead learning

Question 4:

Can you now reflect on these experiences of interaction, that you have described above, and consider how you perceive these interactions as enabling the collective capacity of the system as a whole to lead learning?

Prompts

- ⇒ Do these interactions have an influence beyond those directly involved?
- ⇒ Why, why not?
- ⇒ How might you describe this influence?
- ⇒ Can you recall an example of this?

Question 5:

From your experience of the project can you give an example of when leaders like yourself guided the direction of the project?

Prompts

- ⇒ How were you able to do this?

- ⇒ Why was this able to happen?
- ⇒ What influence did this have on the direction of the project?
- ⇒ What opportunities did this create for new ways of working?
- ⇒ What opportunities did this create for new ways of thinking about your work?
- ⇒ What challenges did you experience?

Question 6:

From your experience in the project, can you provide some examples of how a sense of shared purpose was developed amongst your project team? (or did not develop)

Prompts

- ⇒ How did the purpose become shared? (or why not)
- ⇒ What kinds of experiences allowed people to make sense of the work they were doing in the project?
- ⇒ What was the influence of developing a sense of shared purpose?

From your experience in the project, can you provide some examples of how a sense of shared purpose was developed amongst others (e.g. steering committee/regional teams/school teams) in the project?

Prompts

- ⇒ How did the purpose become shared?
- ⇒ What kinds of experiences allowed others in the project to make sense of the work they were doing?
- ⇒ How do groups with diverse ideas and perspectives achieve a shared purpose?

From your experience in the project, can you provide some examples of how a sense of purpose of the project was (or was not) shared more broadly amongst others in the system that were not directly involved in the project on a regular basis?

Prompts

- ⇒ How did the purpose become shared?
- ⇒ What kinds of experiences allowed these people to make sense of the work of the project?
- ⇒ How do diverse groups within a system achieve a sense of shared purpose?

Question 7:

Are there other aspects of the project or other experiences of the project that we haven't discussed in this interview that you think are important in understanding how leaders, like yourself influence the capacity to lead learning within the context of an education system?

Part 2: Invitation to Participants to draw

We are now finished the first part of the interview and as I mentioned earlier, the second part of the interview includes an invitation to create a drawing or diagram. I will now outline the purpose of inviting you to draw and the process for this, so you are clear about what is involved and so you can also make a decision to participate or not.

The Purpose:

The purpose of inviting you to draw is to gain a greater understanding of the interactions and relationships within the project and how different groups and group members were connected to each other. I am also interested in the strengths of these connections and where learning occurred as a result of these connections. I am particularly interested in how knowledge and ideas were able to flow between people and between groups within the project and to what extent the project groups and project members responded or adapted to new ideas or constraints.

The Process:

I will provide you with A3 unlined paper and some colored pencils and colored markers. You are free to create any kind of representation; a detailed drawing, a sketch, a map, a diagram. You can indicate whether you would like me to remain here or leave the room. You can talk to me throughout the drawing process or discuss your drawing when you have completed it. Like the interview, the discussion will be recorded. The quality of the drawing is not important, and I will reiterate the confidentiality of the researcher knowledge/understanding gained during this process and the anonymity of the drawings.

May be you have some questions about this now before making a decision to participate or not?

Would you like to participate in this part of the interview process?

The following prompts may be useful during the process

- What kind of connections did you identify in the project?
- How did learning, ideas, and knowledge flow between people and groups within the project?
- How would you talk about/demonstrate the nature of the relationships between individuals and between groups within the project?
- How was leadership enacted and experienced in the project?
- What was the influence of the broader system environment on the project and project members?
- How did project members respond or adapt to new ideas or constraints?
- Were there any experiences of disruption? What caused the disruption? What was the influence?
- Were there any experiences of synergy –of any collective efforts by the group or the system as a whole? What was the influence?

Appendix H: Additional Information - Participant Generated Drawings

Participant-generated drawings within the research process offers benefits to the researcher and the research endeavor in terms of broadening the scope of data and providing opportunities to understand the complexities of the phenomena being studied (Gullimin & Drew, 2010).

In the context of this research where there is a particular interest in the complex and emergent nature of the system the opportunity to draw enabled participants to use metaphor, color, line, and other drawing conventions to convey meaning, which may not have been possible through text or verbal responses alone (Buckley & Waring, 2013). The use of participant-generated drawings within the research design enabled participants to give voice to their experiences by creating a tangible object. As Pedersen (2008) suggests, “Pictures are helpers. They help transform abstract and complex feelings, opinions, experiences, concerns, attitudes and worries into tangible objects we can actually talk about, explain and expand” (p. 36).

Participants were given time and space to create and to reflect on their drawing. As interviewer I either remained silent or offered encouragement or assurance during the process (Guillemin & Drew, 2010). Other studies, where participant generated drawings have been used, suggest the time afforded for reflection is important and is a feature that sets this strategy apart from others, such as interviews or focus groups where a participant response is often required immediately (Guillemin & Drew, 2010). As Gauntlett and Holzwarth (2006) suggest, it is the process of taking time to create and reflect that is important “as well as the act of making something that you can look at and think about and change” (p. 85). All participants talked with me as they engaged in the drawing, offering explanations and reflecting on their work.

There are particular ethical issues associated with the use of visual methods that need to be considered before engaging participants in the process of creating drawings. One consideration is the degree to which participants are open to drawing or how comfortable they feel about their proficiency in producing an image. In this study the interview process and the invitation to draw occurred at Step 6 of the data gathering process. This provided time for participants to engage in other data gathering

strategies, building a rapport with me as researcher, and to understand the scope and purpose of the research. The process was also invitational, with a variety of options for creating an image – a drawing, a sketch, a diagram, a map or any form that they felt comfortable with. The researcher emphasised the process of drawing and the reflection, rather than an emphasis on the finished product. The participants were supported and encouraged in their efforts, but were also aware that a decision to withdraw or finishing the task of drawing at any stage would be respected. Of the 7 participants who engaged in this process, 5 expressed their concern about their ability to draw and hoped their drawing skills were not being evaluated. The two who made no comment about their skills as drawers, engaged in drawing during the course of the interview to demonstrate their ideas. They did not wait to be invited; rather they spontaneously used the materials.

Another ethical consideration is the privacy of participant-generated images (Guillemin & Drew, 2010). Participants were asked to indicate whether they consented to their drawings being used in other contexts (thesis documents or publications) and were aware that if their drawings were published no identifying features (e.g. names of people, groups or institutions) would be included with the drawings. Consideration was also given to whether participants felt there would be potential risk in creating a tangible product (drawing) that reflected their personal experiences and understandings of leadership within the context of the education system. In addressing this potential risk the confidentiality of the researcher's knowledge of this encounter (the interview and the drawing) and the anonymity of the drawings was reiterated three times during the process and has been completely adhered to. One participant indicated that a particular part of the drawing was “just for me”.

Appendix I (a) – (n): Data Presentation from Phase 1

The Presentation of Data and the Analysis and Interpretative Process

Appendix I (a) Memoing process.

Step 1 Initial data analysis – Gathering, reading, rereading and memoing

Facilitator:	Your opportunities that you've had in the project that's been enabling of your capacity to lead...	
Interviewee:	Well, the chance to work with two other people in a democratic way, so there's no one that's in charge basically. The three of us work together, and it takes the pressure off to be the jack of all trades kind of thing. It lets your - my own insights come to the fore, without feeling that you have to do a whole lot of things that you just actually aren't that good at, or that helpful when you're trying to lead [laughs]. Also you can go at doing those things, but don't - even though you're not crash hot at them, you can still have a go and they don't - and it's okay for the group that you're leading. You're not a liability to the group, because you've still got three - two other people that are working in with you.	<p>Jayne-Louise Collins 18/1/13 10:07 AM</p> <p>Comment [1]:</p> <p>To lead with two others – no one is 'in charge' To work in a democratic way It takes the pressure of, you don't have to be doing everything, therefore your own insights come to emerge. It doesn't mean you have to be doing everything, or be good at everything It means you can also have a go at things that you might developing for yourself, and it doesn't matter if your not sure, because you are working with others – leading with others</p> <p>PERSONAL CAPACITY BUILDING TO LEAD LEARNING</p>
Facilitator:	When you say a democratic way of working, what kinds of - how would you describe that experience? What's that like in this small team?	<p>Jayne-Louise Collins 18/1/13 10:08 AM</p> <p>Comment [2]:</p> <p>Means everyone has a contribution to make to the work, - as to how things are understood and how things are developed</p> <p>DEMOCRATIC WAY</p>
Interviewee:	Everyone has a contribution to make, as to how things are understood and how things are developed and - yeah, pretty much that sort of thing.	<p>Jayne-Louise Collins 18/1/13 10:41 AM</p> <p>Comment [3]:</p> <p>Working in a democratic way has enabled me to handle the messiness of our work together, to engage in inquiry. When I lead by myself I can't hold the messiness or complexity of the work – but I can do that when I work in a shared way</p> <p>PERSONAL CAPACITY</p>
Facilitator:	So how is that, or in what ways, has that enabled your capacity? What things have been enabling for you, because of this experience? Or what insights might you have about your own leadership?	

Appendix I (b) *Researcher's Self-reflection Note*

Self-Reflection note on the process

The processes I am using in working with the interviews – is one guided by the need to understand the interviews, the meanings within the interviews. I have tried to read the interviews as conversation, with all its twists and turns, tangents, pauses, over speaking... to distill meaning from this as the participants circle through ideas.

I feel this creation of a story that I am making beside the interview keeps me close to the interview, I feel it needs many readings and re readings - so the two need to remain in close connection. Also I feel because the interviews cover so much ground at times, the only way I can make sense of the complex and interwoven ideas is to write about it myself

(Researcher's Notebook – Sept.)

Appendix I (c) *Table 4.4 - Early Coding in Phase 1 Step 2*

Step 2 Coding the data – Marking the text for meaning

Context in which the codes were identified	Early Code
In relation to conversation and dialogue	<ul style="list-style-type: none"> Learning from/with others Creating an environment for dialogue Problem solving and openness to possibilities New ideas/understandings emerged Openness to others and ideas Keeping us focused on intent and reality Deep conversations about meaning of the work Strategies for dialogue – (use of protocols, a shared inquiry, smaller groups, theological reflections, openness to question the important issues) Freedom to have the conversations
In relation to working with different people and ideas	<ul style="list-style-type: none"> Challenge of working with others from different teams/backgrounds Need clarity of purpose of how to work in different ways/with different people Engaging with diverse ideas and people builds capacity Diversity meant we talked about the important issues of our work Diversity as a disruption to self and what is valued Diversity as a disruption to the usual way of working
In relation to system frameworks	<ul style="list-style-type: none"> Common frameworks –grounds our work in students Centre point – believe in this Getting people talking about what matters They are a provocation Many ways to engage with frameworks Invite people into dialogue No system way of enacting frameworks

	Come to life through schools- through the story
In relation to purpose (project/system)	<p>Commitment to purpose</p> <p>Enactment of purpose</p> <p>Grappling with purpose</p> <p>Disparate purpose across groups</p> <p>Conflict around purpose/enactment</p> <p>As a provocation for deep conversation on what matters</p> <p>Shared purpose through shared learning</p> <p>Shared system frameworks anchor purpose</p>
In relation to leadership	<p>Grappling with descriptions and metaphors for leadership</p> <p>Shifting identities of leaders</p> <p>Openness to listen, to learn from others and to question</p> <p>Complexity and messiness</p> <p>Build relationships/trust</p> <p>Perceptions of leadership in existing culture</p> <p>Leaders being in the learning to lead the learning</p> <p>Risk talking and open to possibilities</p> <p>Expectations of leaders not met</p>
In relation to a system way of working	<p>Understanding/mindful of a system way of working</p> <p>Grappling with new ideas and questions</p> <p>Multiple ways of working connected to broad/worthy focus</p> <p>Challenge of working in existing culture/context - clash</p> <p>No system way of working</p> <p>Competing priorities</p> <p>Frustrations and fragmentation</p> <p>Essence of what we are on about</p> <p>Disappointment – personal conflict</p>
In relation to being a learner	<p>Committed to own learning</p> <p>Learning from others</p> <p>Collective learning</p> <p>Trusting the processes</p> <p>Leader as learner</p> <p>Time for learning - to reflect to listen – for new ideas to emerge</p> <p>Need to connect to each other/ schools to learn</p> <p>Learning opportunities diminished</p>
In relation to ways of working together	<p>Finding own direction</p> <p>Disruptions</p> <p>Uncertainty about how to work</p> <p>Seeking a balance – confusion and cohesion - leading to success/capacity building</p> <p>Connectedness to each other/the experience</p> <p>Being with people</p> <p>Inquiry, feedback, reflection</p> <p>Noticing how others worked and enacted leadership</p> <p>Focused on functions of managing not learning or capacity building</p> <p>Wanting consistency and consensus</p>

In relation to understanding self and others	Connecting to the story of others Understanding our own identity (shifting) Creating space for understanding Grappling with our own understandings and shared understandings
In relation to making connections across the system	Connecting to other teams/schools Connecting to other people in different roles across system Disconnections Challenge of working with others and their ideas (with diversity) Supported by focus on purpose Out of the silos Opening up/Closing down the learning Deepens understandings/ explore ideas Develops the sense of a collective
In relation to the use of evidence ***	Success is difficult to define Data driven Evaluation - we didn't address the value of what we were trying to do Expectations of what is evidence and who is it for Beyond numbers

Appendix I (d) Criteria for Refined Codes

Criteria Number	Criteria A refined code was selected if:
1	It could be used to label text within 6 of the 7 one to one interviews.
2	It could be used to label text within 2 of the 3 school based focus groups
3	It could be used to label text within 2 of the 3 non-school based focus groups
4	It was inclusive of the diversity of experience and perspectives of all leaders.
5	Criteria 1 to 3 are not met, but the refined code labeled text that was given considerable attention by the interviewee within the interview; that is, the interviewee speaks of the ideas associated with the code at length beyond a question and response, returns to the topic within the interview or displays body gestures or voice tone to indicate an idea of importance to that person).

Criteria 1-3 were chosen to refine the number of codes and to ensure that the analysis and interpretation was able to produce in-depth descriptions and richly formed texts.

Criteria 4-5 were chosen to ensure the multiple realities and perspectives of leaders were explored within the analysis and interpretative process.

There was only one set of early codes grouped as a possible refined code that did not meet the criteria. This particular group of early codes can be found in Appendix I (c) above under the heading, *In relation to the use of evidence ****.

Appendix I (e) Table 4.5- Early Codes to Refined Codes and Refined Code Descriptors

Early Codes

- *Learning from/with others*
- *Creating an environment for dialogue*
- *Problem solving and openness to possibilities*
- *New ideas /understandings emerged*
- *Openness to others and ideas*
- *Keeping focused on intent and reality*
- *Deep conversations about meaning of the work*
- *Strategies for dialogue*
- *Freedom to have the conversation*

Refined Code: Being in dialogue with others

This code was used to label the text when participants used the word dialogue or conversation to refer to a way of working and learning together in one or more contexts. The code was used when participants referred to the qualities of dialogue (exploratory, open), the conditions that enabled dialogue (equity of view, mindfulness of language) and what the dialogue enabled (focus on purpose, new ideas to emerge, capacity building).

Early Codes

- *Challenge of working with others from different teams/backgrounds*
- *Need clarity of purpose of how to work in different ways/with different people*
- *Engaging with diverse ideas and people builds capacity*
- *Diversity meant we talked about the important issues of our work*
- *Diversity as a disruption to self and what is valued*
- *Diversity as a disruption to the usual way of working*

Refined Code: Experiencing Diversity

This code was used to label the text when participants referred to working and learning with people from different teams or locations enabling them to engage with new and different ideas. The code was used when participants spoke about the experience of diversity (*as challenging, disruptive, open, new learning*) and what it enabled (*new perspectives, capacity building, an openness to listen to each other*) or how it caused frustration and uncertainty (*how am I going to forge a way through*).

Early Codes

- *Commitment to purpose*
- *Enactment of purpose*
- *Grappling with purpose*
- *Disparate purpose across groups*
- *Conflict around purpose/enactment*
- *As a provocation for deep conversation on what matters*
- *Shared purpose through shared learning*
- *Shared system frameworks anchor purpose*

Refined Code: A focus on purpose and enactment of purpose

This code was used to label the text when participants referred to the shared or moral purpose of their work. The code was used to label the experiences of commitment to purpose (*through dialogue, building trust, through grappling with understanding*) and the experiences of conflict in understanding the enactment of purpose (*disparate, different values, focusing on intent and the reality*).

Early Codes

- *Common frameworks –grounds our work for students*
- *Centre point – believe in this*
- *Getting people talking about what matters*
- *They are a provocation*
- *Many ways to engage with frameworks*
- *Invite people into dialogue*
- *No system way of enacting frameworks*
- *Come to life through schools- through the story*

Refined Code: System Frameworks

This code was used when participants referred to the system frameworks, how they felt about them (*the source, they come alive, strong rationale for your work*) and their purpose (*to encourage debate, reflects moral purpose, to focus on what matters*). The code was also used to identify the conflict and challenge in enacting the system frameworks (*no system way of working, confusing, different understandings*)

Early Codes

- *Grappling with descriptions and metaphors for leadership*
- *Shifting identities of leaders*
- *Openness to listen, to learn from others and to question*
- *Build relationships/trust*
- *Perceptions of leadership in existing culture*
- *Leaders being in the learning to lead the learning*
- *Risk talking and open to possibilities*
- *Expectations of leaders not met*

Refined Code: Enacting leadership

This code was used when participants used language to describe the kind of leadership enacted or experienced (*collective, democratic, shared, equal, within the person, managerial, the personality*). The code was also used when participants named leadership behaviors (*risk taking, listening, openness to learn, questioning*) and what these leadership behaviors enabled (*dialogue, commitment to purpose, openness to difference, trust, opportunities to grapple with new ideas, allowing many people to contribute to the work*). The code was used to identify the challenges of such experiences (*uncertainty, frustration, change in understanding of self as leader*) and to label the perceptions participants had about this kind of leadership within the broader system context (*weak, loose, task driven*).

Early Codes

- *Understanding/mindful of a system way of working*
- *Grappling with new ideas and questions*
- *Multiple ways of working connected to broad/worthy focus*
- *Challenge of working in existing culture/context - clash*
- *No system way of working*
- *Competing priorities*
- *Frustrations and fragmentation*
- *Essence of what we are on about*
- *Disappointment – personal conflict*

Refined Code: Ways of working as a system

This code was used when participants reflected on their experiences of working and learning as a group or as a system. The code was used to identify the understandings participants had of a system way of working (*deep projects, seeding change through people, inquiry, driven by questions, connected*) and the experiences of enacting this way of working within the existing culture (*distracting for schools, different priorities, hierarchical/bureaucratic based culture, disconnected*). The code was also used to identify how system leaders responded to challenges, influenced the context or worked within the context (*dialogue reinforces our intent, we are clear about what we want to achieve, here are the parameters and how do we work with them*).

Early Codes

- *Finding own direction*
- *Disruptions*
- *Uncertainty about how to work*
- *Seeking a balance – confusion and cohesion - leading to success/capacity building*
- *Connectedness to each other/the experience*
- *Being with people*
- *Inquiry, feedback, reflection*
- *Noticing how others worked and enacted leadership*
- *Focused on functions of managing not learning or capacity building*
- *Wanting consistency and consensus*

Refined Code: Ways of working together

This code was used when participants described the experience of working with each other in the context of the project (*overwhelming, challenging, uncertain, disrupting the usual way of working, connected, meaningful, being with*) and what this experience enabled for them as a collective (*our best work, finding our own way, deep conversations about challenges, step up and lead, self-reflection, the default position, new perspectives*). The code was also used to identify how system leaders across the different groups described the way of working (*inquiry focused, using feedback, reflection, focused on functions of management*)

Early Codes

- *Committed to own learning*
- *Learning from others*
- *Collective learning*
- *Trusting the processes*
- *Leader as learner*
- *Time for learning - to reflect to listen – for new ideas to emerge*
- *Need to connect to each other/ schools to learn*
- *Learning opportunities diminished*

Refined Code: Leader as learner

This code was used when participants referred to their disposition to be a learner with colleagues and to learn from colleagues (*need to be in the learning, connecting to the learning, learning from schools, we need each other*). The code was also used when participants referred to how their learning was diminished (*don't allow time for reflection, gatekeepers who say, who you can learn from or connect to, I thought they would learn from us*).

Early Codes

- *Connecting to other teams/schools*
- *Connecting to other people in different roles across system*
- *Disconnections*
- *Challenge of working with others and their ideas (with diversity)*
- *Supported by focus on purpose*
- *Out of the silos*
- *Opening up/Closing down the learning*
- *Deepens understandings/ explore ideas*
- *Develops the sense of a collective*

Refined Code: Making connections and expanding the contexts for working

This code was used when participants talked about the experience of working and learning with others in different teams or with different roles and what this enabled (exploring new ideas, deep conversations, learning from each other, meaningful focus and purpose, we need each other, seeing new possibilities). This code was also used to identify the challenges of working with people from different contexts (it's disruptive, the 'we' is a provocation, lack of clarity) and to label the experience of having connections to others restricted (I feel disconnected, we keep closing it off)

Early Codes

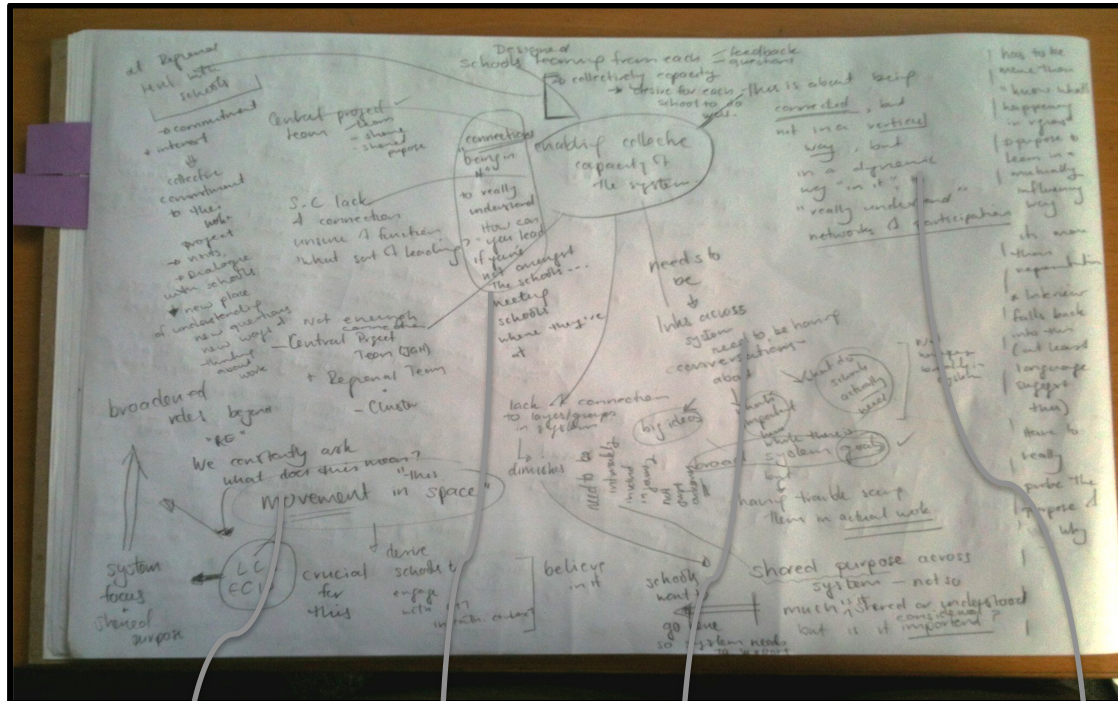
- *Connecting to the story of others*
- *Understanding our own identity (shifting)*
- *Creating space for understanding*
- *Grappling with our own understandings and shared understandings*

Refined Code: Understanding self and others in relation to the work

This code was used when participants reflected on how they understood themselves in relation to their work (*you have to understand who you are in the work, finding space in yourself for this, it is getting to the essence of what we are on about*). The code was also used when participants described how they came to a deep understanding of their work through understanding others (*through dialogue we understand the story, we understand why, we had to take account of other views*).

Appendix I (f) Visual map with annotations.

Step 3 Codes to themes – Connecting and seeing the patterns.



There is a movement into 'this space'

Connections – 'being in it' to really understand...How can you lead if you are not

Links across the system – having the conversations – about the big ideas, what's important here, what is actually needed?

This is about being connected, but not in a vertical way, but in a dynamic way 'in it' to 'really understand' – these are networks of participation.

Appendix I (g) Self-reflection note

Self-Reflection note on the process

I have been working with the interviews for sometime now – reading and writing about them and now creating maps of the interviews- so I can visualize them. I sense that I have a good feel for them by doing these visual maps – they are becoming a good point of reference for understanding what the key themes might be. I am starting to see the relationships between things – between these codes – between what might be the themes and the levels of the themes.

Researcher' Notebook (Oct.)

Appendix I (h) *Criteria for the Development of Themes from Refined Codes*

Criteria Number	Criteria
1	An individual theme is developed directly from three or more refined codes (therefore the theme development is influenced by the criteria for refined codes, Table 5.3).
2	Collectively all themes developed include all refined codes.
3	The theme is inclusive of the diversity of experience and perspectives of all leaders.

Appendix I (i) *Development of Theme 2: Creating expanded and connected contexts for working and learning*

Refined Codes (Taken from Table 4.5)	Selected participant comments	Summary statement of leader experiences	Theme 2
Experiencing diversity	<p>“the movement is really critical... it gives me freedom. I can’t believe I’m learning if I’m staying in the one place...it strengthens my role and gives me purpose” (Int 1)</p> <p>“we have conversations, we work with it [ideas], bring it back and forth – it’s the back and forward between people and between groups that’s building collective capacity” (FG 4)</p>	<p>This has been an experience of multiple connections across the system</p>	Creating expanded and connected contexts for working and learning
Ways of working as a system	<p>“bringing five schools together, the organisation of classroom leader, teacher leader and principal leaders.. I found a lot of support and capacity building within these different groups, through sharing and hearing beyond ourselves” (FG 2)</p>	<p>This has been an experience of provocation and challenge</p>	
Ways of working together	<p>“we had always worked separately before. This was quite unique; this has been an opportunity for us and schools to work on something meaningful” (Int 5)</p>		

<p>Making connections and expanding the contexts for working</p>	<p>“I don’t have a sense of connection with anything beyond the immediate people I work with, it’s too linear ... I don’t feel connected at all to teachers and students” (Int 7)</p> <p>“It’s the ‘we’ in the project – it’s the ‘we’ space. It’s trying to find a way through so that the purpose and the ‘we’ becomes clearer and that is really hard” (Int 2)</p> <p>“we had to grapple with new ways of working as a team to be able to understand different perspectives, to make sure all voices were listened to” (FG 4)</p>	<p>This has been an experience of learning from and with each other.</p>	
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Appendix I (j) *Development of Theme 3: Creating and sustaining a sense of system*

<p>Refined Codes (Taken from 4.5)</p>	<p>Selected participant comments</p>	<p>Summary statement of leader experiences</p>	<p>Theme 3</p>
<p>A focus on purpose and the enactment of purpose</p> <p>Ways of working as a system</p> <p>Enacting leadership</p>	<p>“I don’t think this project is going to revolutionise the way we work, though I do think the people working in them through these projects generate new ways of working, that will reform – it’s in the person and in their interactions, modeling of new relationships and trust” (Int 3)</p> <p>“if you reflect on the system and the bureaucratic nature of the system, where you step through things, this was a different model or process. It becomes very freeing, because you often aren’t given many choices or options, in this model it was here are the possibilities, what’s your path through this, it is much more freeing and there is ownership” (FG 1)</p> <p>“there was a sense of connection between things...the project allowed you to draw on range of things...I saw a connection between areas of the CEO, encouraging you to decide your direction, allow you to have the conversations, support you in this... it was the facilitation of learning, not just within the school but with other schools...this has been the most</p>	<p>This has been an experience of designing for system learning</p>	<p>Creating and sustaining a sense of system</p>

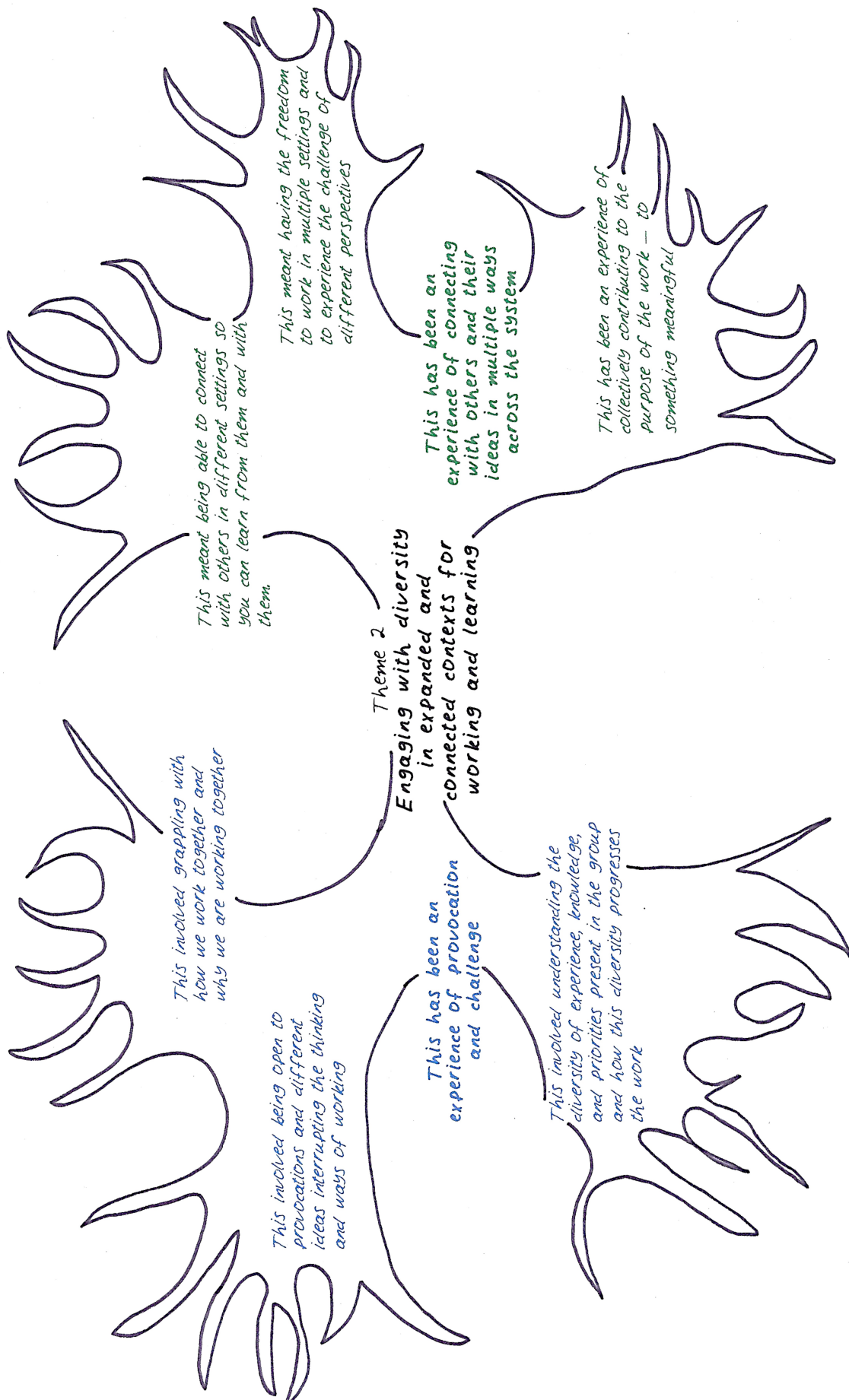
<p>Ways of working together</p>	<p>powerful of all” (FG 1)</p> <p>“I don’t know whether it’s a question of the purpose being understood. I think it’s a question of importance, because there are a lot of other agendas out there” (Int 1)</p> <p>“We have a statement of intent but with no commitment to what this might mean... That gets in the way... it can be distracting to schools...it can frustrate the work and put you in opposition to other things” (Int 3)</p> <p>“[the changing priorities] has the potential to detract from the value of the project at the school level and the office level.....so there is a danger – that distracts from this kind of system learning” (FG 2)</p>	<p>This has been an experience of grappling with the frustration and the disconnection</p>	
<p>System frameworks</p>	<p>“we’ve got really strong frameworks that invite people into dialogue and a debate about why they do what they do, the frameworks push thinking and encourage a debate. We set up an environment that says that’s a good thing... to contest...that’s a powerful system function” (Int 3)</p> <p>“What’s been crucial is Learning Centred Schools, a Sacred Landscape...schools really embrace this, they believe in it, I really believe in it...they want it to come to life, that’s why there is a shift a movement” (Int 1)</p>	<p>This has been an experience of engaging with system frameworks that capture the ‘big ideas’ and keep the system focused.</p>	

Appendix I (k) *Development of Theme 4- Leadership: being within and enacting open communities of learning*

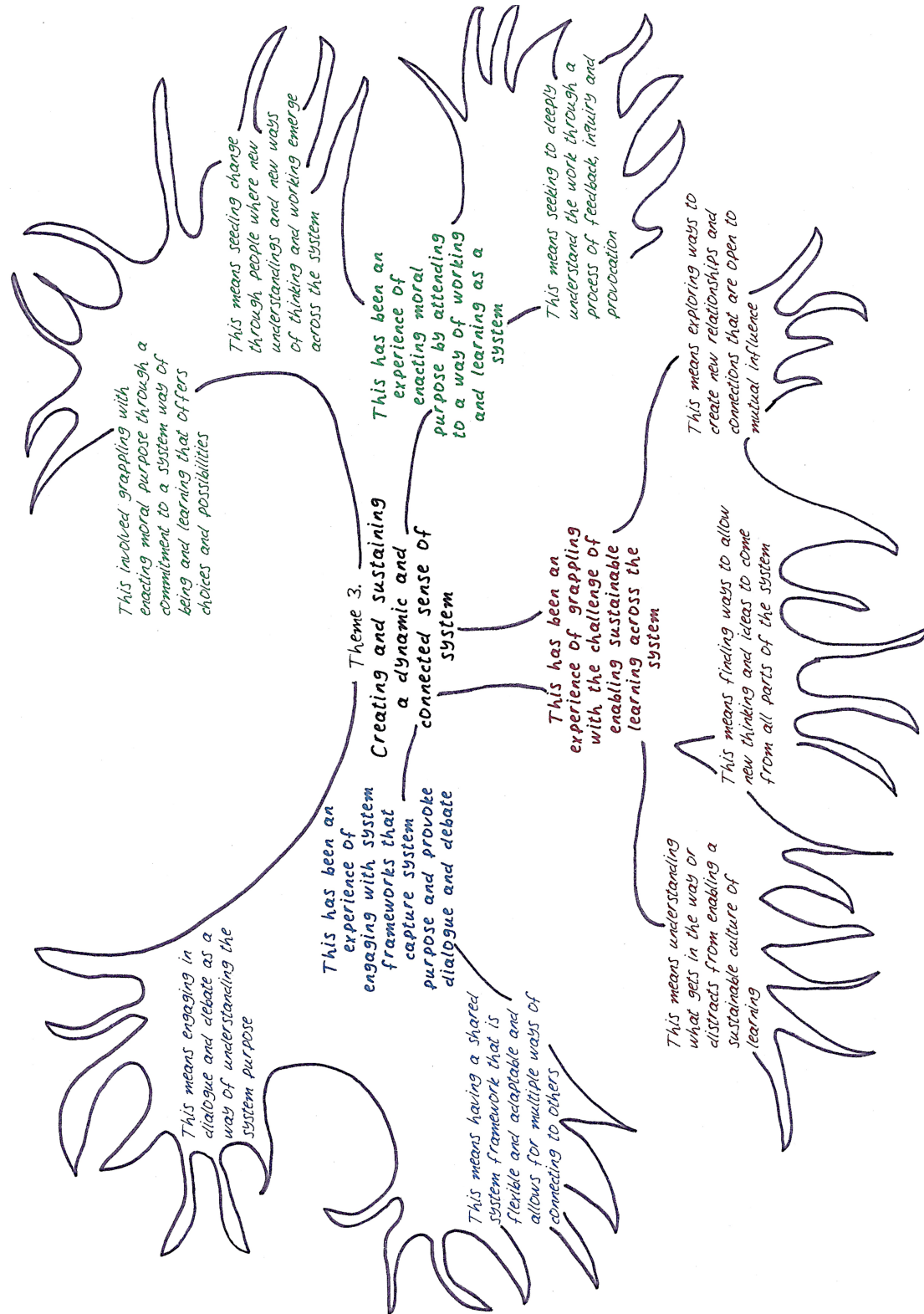
Refined Codes (Taken from Table 4.5)	Selected participant comments	Summary statement of leader experiences	Theme 4
<p>Ways of working together</p> <p>Leaders as learner</p> <p>Enacting leadership</p>	<p>“It was the first time I sensed this confusion, normally going into these sorts of projects we would be told what we were doing. It wasn’t even like we had an idea, this was very open, this sense of contemporary learning in a Catholic School” (FG 1)</p> <p>“The notion of developing clarity, jumping into the murkiness and letting the clarity develop is such an uncomfortable position that it was almost a no go zone” (FG 4)</p> <p>“I was coming to understand maybe we’re too used to being given the answers and being led. Maybe the purpose of the project is for us to explore in ourselves our own capacity, the school’s capacity, the regional capacity what is learning and teaching in a Catholic School” (FG 2)</p> <p>“as a leader putting out there your own ideas. Not holding back. Here is a process, what do you think? You have your own voice as well. You have to put your ideas out there. But knowing that it may not be taken up, or it will be modified or it’ll evolve, it’ll emerge” (Int 7)</p> <p>“if you don’t know this stuff, you’ve got to listen and attend to it, this is my leadership action as much as it is, I’ve got something to offer” (Int 3)</p> <p>“it is interesting to get an idea that they[the office people] were working on something new for them too... They were learning...it wasn’t them just watch us learn. It crossed my mind that it wasn’t something</p>	<p>This has been an experience of moving from uncertainty to making meaning and seeking clarity.</p> <p>This has been an experience of leaders enacting their commitment to purpose and building trust and relationships</p>	<p>Leadership: being within and enacting open communities of learning.</p>

<p>A focus on purpose and enactment of purpose</p> <p>Being in dialogue with others</p>	<p>they totally owned, they were exploring and deciding for themselves, what worked, what they were learning. I got a sense they were getting something out of the project, they weren't just providing for us" (FG 1)</p> <p>"It [the leadership] is very equal, not controlling but allowing everyone to have an equal say in the group" (Int 4)</p> <p>"I felt all levels of leadership were working together...we were all sitting together looking at the contemporary learning schema and exploring what mattered to our school...there was an evenness in the group.. it definitely seemed like all parts of leadership were represented.. The connectedness was apparent" (FG 1)</p> <p>"it's democratic where basically no one is in charge...working together with two or three others to lead, it takes the pressure of doing everything...it lets your own insights come to the fore...It means I can handle the messiness of an inquiry process much better... when I lead by yourself I can't hold the complexity and the messiness. I can do that when I'm working in a shared way" (Int 7)</p>	<p>This has been an experience of grappling with alternative understandings of leadership</p>	
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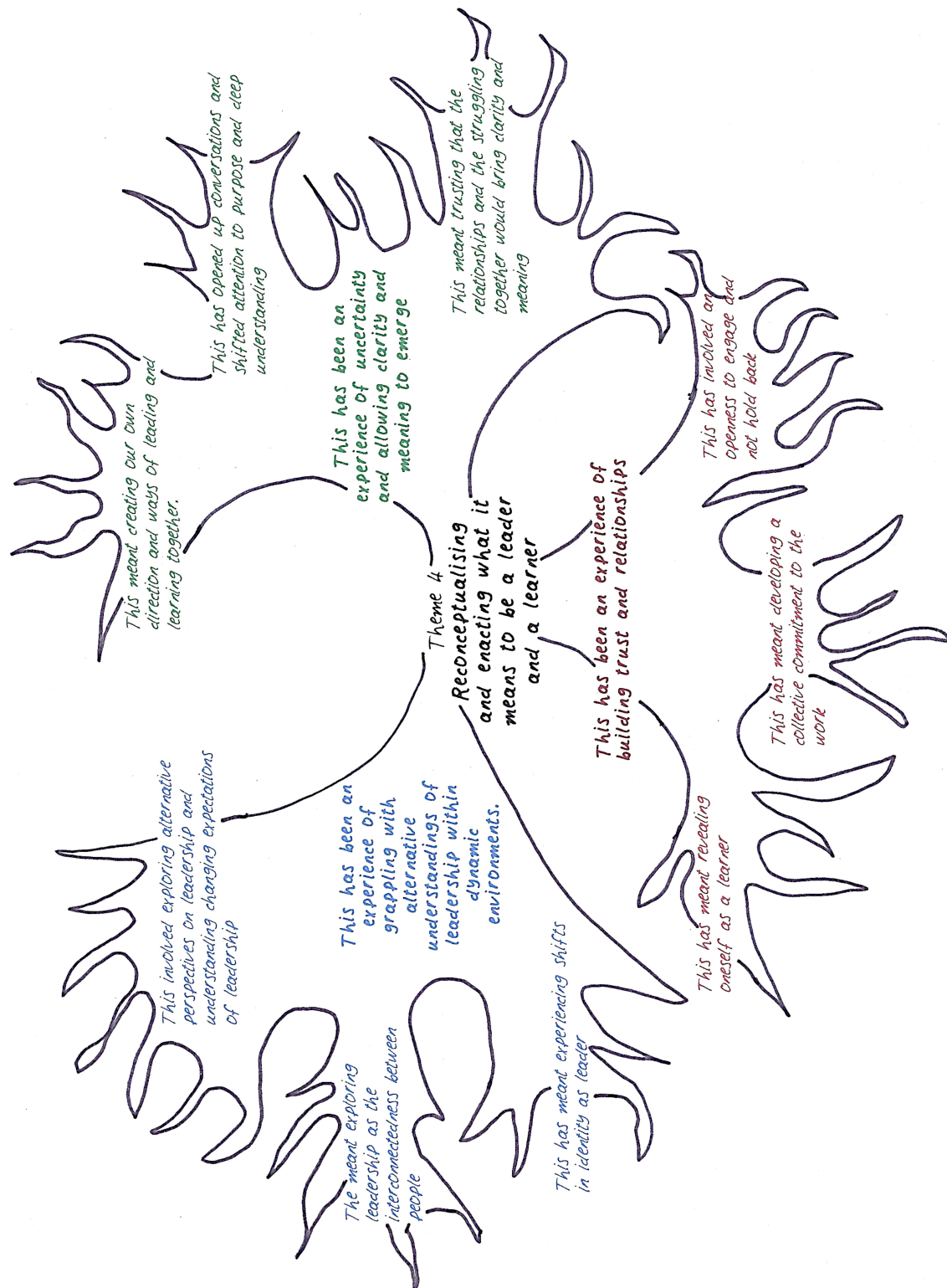
Appendix 1 (I) Thematic Network 2: Engaging with diversity in expanded and connected contexts for working and learning.



Appendix 1 (m) Thematic Network 3: Creating and sustaining a dynamic and connected sense of system.



Appendix 1 (n) Thematic Network 4: Reconceptualising and enacting what it means to be a leader and a learner.



Appendix J: ACU Human Research Ethics Committee – Approval Form



Human Research Ethics Committee
Committee Approval Form

Principal Investigator/Supervisor: Dr Deborah Robertson / Assoc Prof Michael Bezzina

Co-Investigators:

Student Researcher: : Ms Jayne-Louise Collins

Ethics approval has been granted for the following project:

System Capacity Building: An exploration of the experiences of system leaders in the context of the project Leading for Contemporary Learning Catholic Schools.

for the period: 07/08/2012-31/12/2013

Human Research Ethics Committee (HREC) Register Number: 2012 190N

Special Condition/s of Approval

Prior to commencement of your research, the following permissions are required to be submitted to the

ACU HREC:

N/A

The following **standard** conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans (2007)* apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
 - security of records
 - compliance with approved consent procedures and documentation
 - compliance with special conditions, and
- (ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
 - proposed changes to the protocol
 - unforeseen circumstances or events
 - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than low risk. There will also be random audits of a sample of projects considered to be of negligible risk and low risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

A handwritten signature in black ink that reads 'K. Pashley'.

Signed: Date: 13/04/2015.....

(Research Services Officer, McAuley Campus)

Appendix K: Catholic Education Office Melbourne – Research Approval

GE12/00009
1818

27th June 2012

Ms J L Collins
31 Walker Street
Rippleside
NORTH GEELONG
VIC 3215

Dear Ms Collins

I am writing with regard to your research application received on 23rd June 2012 concerning your forthcoming project titled *System Capacity Building: An exploration of the experience of system leaders in the context of the project Leading for Contemporary Learning in Catholic Schools*. You have asked approval to approach Catholic schools in the Archdiocese of Melbourne, as you wish to include teachers and principals in your research.

I am pleased to advise that your research proposal is approved in principle subject to the seven standard conditions outlined below.

1. The decision as to whether or not research can proceed in a school rests with the school's principal, so you will need to obtain approval directly from the principal of each school that you wish to involve.
2. You should provide each principal with an outline of your research proposal and indicate what will be asked of the school. A copy of this letter of approval, and a copy of notification of approval from the university's Ethics Committee, should also be provided.
3. You should provide the names of the schools which agree to participate in the research project to the Knowledge Management Unit of this Office.
4. Any substantial modifications to the research proposal, or additional research involving use of the data collected, will require a further research approval submission to this Office.
5. Data relating to individuals or schools are to remain confidential.
6. Since participating schools have an interest in research findings, you should consider ways in which the results of the study could be made available for the benefit of the school communities.

7. At the conclusion of the study, a copy or summary of the research findings should be forwarded to this Office. It would be appreciated if you could submit your report in an **electronic format** using the email address provided below.

I wish you well with your research study. If you have any queries concerning this matter, please contact Ms Lisa Guerin of this Office.

The email address is <km@ceomelb.catholic.edu.au>.

Yours sincerely

Carl Stevens
MANAGER, POLICY & RESEARCH

Appendix L: Thematic Network 1 – Experience 3

This has been an experience of understanding how to work in the context.

The leaders experienced a dissonance between the ways of working within the project and the organisational model of the broader education system context. One leader referred to the broader context as “*an organisation that is very much hierarchical, very much focused on structural processes... dialogue is the antithesis of that culture*” (Int 3, p. 4). However, the processes of dialogue enabled leaders to stay focused, develop a collective commitment to the intent of the project, and to take a problem solving approach to working within a structured and controlled broader environment:

there’s been times where our moral purpose has been in conflict with the organisational parameters placed upon us. But that hasn’t stood in the way of going forward... because the dialogue reinforces the intent, which reinforces the learning, which reinforces the desire to problem solve and to say, okay, here are the parameters. How do we work with them? How do we make the most of this? The dialogue has been one of inquiry all the way through. (Int 3, pp. 4-5)

The opportunity for dialogue and problem solving was particularly important when there was uncertainty about the continuation of the project. Leaders were able to openly discuss the risks and how they would continue to work and learn together. The dialogue enabled leaders to collectively reaffirm their commitment to the intent of the work and why they were engaged in the work:

We looked at all the possibilities. We took a positive stance – it was not about making the best of things, we did more than that. It was really looking at the possibilities and ensuring there was a way forward. We ensured we would keep learning from what we had already done (Int 6, p.30)

Dialogue, as a way of working and learning together, enabled leaders to reaffirm their commitment to the intent of the work, to each other, and to the way of working. The dialogue and collective commitment enabled leaders to be courageous in their actions:

In this new way of working, it says trust the process; that’s what we did, it was key. Our vision was so clear and it was something we all wanted and something we all owned. We’d planned to do this, so how are we going to move forward ... that’s what got us back up again. (Int 6, p.36)

Eventually, however, a decision was made to finish the project early (after 18 months of a 3 year project), highlighting the different sets of values, and the subsequent different understandings about enabling capacity building across the system. When the project finished early some leaders wondered whether their work was valued, *“I would say I felt undervalued, let down” (Int 6, p.35)*, while others reflected on whether the work of the project was important in relation to overall priorities of the system. *“I don’t know whether it is a question of the purpose being understood. I think it might be a question of importance because I think there are a lot of other agendas out there that are being pushed” (Int 1, p.22)*. While the processes of dialogue had strengthened the commitment leaders had to the intent of the project and their ways of working, the challenge remained of how to influence more traditional organisational environments and sustain dialogical ways of working and learning in these environments. This will be explored further in thematic network 3.

In summary, leaders in the project grappled with how to work in a broader system context that reflected more traditional organisational structures and processes. During times of uncertainty, the dialogue enabled leaders to maintain a strong connection to the moral purpose of the project and to each other. Leaders were focused on their shared intent and on the possibilities for continuing the work. However the particular characteristics of the broader education system – hierarchical power and centralised decision making - meant it was difficult to sustain the work of the project.

Interim finding (8): Dialogical ways of working are difficult to sustain in traditional organisational structures.

Appendix M: Thematic Network 3 – Experience 3

This has been an experience of engaging with system frameworks that capture purpose and provoke dialogue and debate.

The third experience reflected in this thematic network describes how leaders engaged with system frameworks. These experiences capture how leaders in the project understood the possibilities of the system frameworks and what these offered for enacting a deep sense of moral purpose. When leaders talk about system frameworks they are referring to one or more of the following documents; the education system Strategy Plan, the education system Learning and Teaching Strategy and Framework or the supporting Learning and Teaching documents and schemas (CEOM, 2009c). The project design drew on all these documents and they provided the rationale for the project and its goals (CEOM, 2010b).

In reflecting on the system frameworks, Grace offered an image of these frameworks as a “*source of energy*”, “*a space we gravitate to*”, and “*a space where we come to understand the purpose of our work*”. She suggests it is the engagement of the person with the documents that is important, as it is through the person they are enacted.

there is always a central point to something – a starting point if you like, or something that brings us together....these are just documents, but I think people are at the centre....it is people that bring these documents to life. They are just merely words. It is the person who makes the space sacred. We need to come back to these sources constantly – making that come to life. That needs to give us energy for our work. (Int 1, p.30)

Another leader also spoke about how the documents “came to life” through people.

Having a solid research base isn't much until I see it in action. I like to hear the story...hearing the story of how it actually works with kids and staff.... that makes it [document] a living experience for me. (Int 5, p.21)

The experiences of these two leaders suggest the system documents not only articulated the moral purpose of their work, but they also offered leaders a way to connect to their work on a personal level, in a way that prompted leaders to describe the documents as a living experience or life giving.

The system frameworks were also described as dynamic, offering leaders opportunities to understand their own beliefs and practices and to be in dialogue with others about the purpose of their work and how they interpreted this purpose.

it is all about shaping our thinking...getting people talking and contesting if we've got really strong frameworks that invite people into dialogue and debate about why they do what they do and those frameworks then push thinking and encourage that debate and we set up an environment that says that's a good thing that enables people to contest the evidence – it gives access to an evidence base that's a really powerful system function. (Int 3, p. 35)

The system documents were also described as promoting possibilities and enabling those in schools to be creative and responsive to their own setting.

The contemporary learning schema [system document] is fantastic...it's a framework you have in front of you... it promotes possibilities... it's picked up the complexity, but presented simply, it has allowed schools to create and to respond. It has been our common language. (FG 3, p.17)

The experiences of these leaders suggest that the system frameworks offered possibilities; they were documents that invited dialogue and discussion. While most leaders referred to the system frameworks during the interviews and focus groups, they did not offer extended commentary on them. Leaders referred to the frameworks in two different contexts; a) in a way that suggested it was generally understood how useful the system documents were in framing the purpose of the system, “*offering high moral purpose*”, “*foundational to the project*”, “*shining a light on our work*” or, b) as a way to highlight the disconnection between the documents and the way of working in the system, “*they could've been a real driver*”, “*there's potential but I don't think it's consistent, I don't think it's cohesive across our system*”, “*We have the statement of intent but with no commitment of what that might mean*”. The gap between the possibilities of the system frameworks, and the enactment of these frameworks through a system way of working, was discussed in detail in Experience 2.

In summary, the experience of leaders identified how the current system frameworks were useful, capturing the moral purpose of the education system. For some leaders, not only did they capture moral purpose, but they also gave expression to how they personally understood their work. However, while leaders understood that the frameworks were

essential in offering an expression of aspirational intent, they suggested that there needed to be a greater focus on ways of enacting this intent. Leaders recognised a disconnection between the aspiration of the education system and a commitment to a system way of working to realise this aspiration.

Interim Finding (10): Leaders interpreted the system frameworks by bringing the frameworks into dialogue with the experiences from their day-to-day work.