

Mapping the Conceptual Landscapes of School-University Partnerships in New Zealand

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THESIS ABSTRACT

The aim of this research is to identify relationships between ideas that are currently influencing 'partnership' in the New Zealand education system. The focus is on how institutions express ideas related to school-university partnership. The research explains how ideas about 'partnership' in education are currently framed, and tentatively suggests how partnership might be better approached.

The research responds to a shift toward more collaborative models of professional practice in the education system. It assumes that the conceptual frameworks institutions use to express ideas of partnership are a foundation for the creation, discussion, and practice of partnership. By investigating schema used by the Ministry of Education, schools, and universities this research makes explicit some assumptions related to 'partnership' in education.

It investigates implicit schema through an analysis of how institutions present ideas about 'partnership' on public webpages. Using discourse analysis approaches to uncover different perspectives and deeper conceptual understandings, this study focuses on ways different institutions construct meanings and express concepts related to 'partnership'. Using a critical realist theorising methodology it also examines causal mechanisms, attributes, and conditions related to the entity of 'partnership'.

The findings suggest that currently four key purposes for partnership exist in the New Zealand education system. They suggest that learning to 'cope' with unpredictable change is a generative mechanism for partnership. Intertwined underlying schema that may influence current understandings of partnership and collaborative practices are identified. The findings also suggest that the schema of systemic improvement is inherently flawed. The research outlines how a schema promoting 'thinking systemically' may be a means to overcome a current gap between the 'promise' of partnership and partnership in practice.

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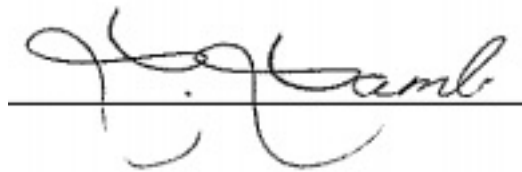
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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

A handwritten signature in black ink, appearing to read "J. J. Lamb", is written over a horizontal line.

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ETHICS APPROVAL

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CHAPTER ONE: INTRODUCTION

1.1 Overview

I have chosen to research school-university partnerships in New Zealand because I am passionate about building strong communities, and about what I believe can be achieved through collaboration. I have experienced a variety of educational partnerships in over 20 years as an educator. I have realised that partnerships can be diverse, challenging, mundane, dispiriting, enlightening, and invigorating. There is a significant body of literature that describes similar types of experiences by many others. By conducting this research I hope to contribute something that differs from a description of school-university partnerships. Through this research, I hope to explain the ways in which concepts of 'partnership' might be understood in the current New Zealand education system.

This chapter introduces school-university partnerships. The chapter briefly traces the historical context for school-university partnerships in New Zealand. It continues with an explanation of why school-university partnerships remain a relevant focus for study. Finally, the chapter outlines an overarching intent for this research.

1.2 The history of school-university partnerships in New Zealand

School-university partnerships are agreements between institutions to work collaboratively to enhance education. School-university partnerships are not new. The historical backdrop from which the first school-university partnerships emerged is linked to a collegial interest in learning and pedagogy, and the development of specialised teacher education. The history of school-university partnerships in New Zealand demonstrates that the purposes of collegial, collaborative practice interact with concepts of professionalism, educator identities, systemic learning, and institutional expertise.

In 1873, Britain's first professorship in education (Aldrich, 2012) and the United States' first permanent department of pedagogy (Ogren, 2013) were established. By 1876, the Dunedin College of Education opened for primary teacher training (Keen, 2001). The demand for trained teachers, beyond the pupil-teacher model, increased in New Zealand after the introduction of the 1877 Education Act (Openshaw & Ball, 2006). Partnerships between schools and tertiary institutions formally began with the Christchurch Normal School and the Christchurch College of

Education in 1877. Currently, New Zealand has a 140-year history of institutions agreeing to work together to enhance education.

Dewey's establishment of the Chicago Laboratory School in 1896 is a notable example of a school-university partnership because of its progressive ideas of social equity that challenged "inherited customs which transfigured the teacher, upon entering the class-room, into a superior being, omnipotent and all-wise" (Flagg Young, 1900, p.17) and promoted interaction between students, teachers, and professors in an ongoing community-oriented educational process. In the late 1930s, New Zealand adopted notions from Dewey's progressive education. The national urge toward progressive education occurred within the context of national teacher training being debated. A vision for the "change in status of teachers from that of subordinates to that of members of a profession with greater freedom and less regimentation" (Kandel, 1938, p.427) hinged upon the notion that teacher education was more properly provided "in the wide spaces of a university than in the cloisters of a training college" (Davies, 1938, p.433). Consequently, school-university partnerships in New Zealand have been influenced by the debate about teacher professionalism – in theory (university) and in practice (school). The historical emergence of partnerships between schools and universities is embedded in debate between teaching as a craft and teaching as a profession.

Over the last thirty years, it has been recognised that school-university partnerships offer "rich possibilities for transformative professional action" (Moss, 2008, p.345) but they are not simple. Partnerships straddle institutional boundaries, progressing separate institutional and partnership goals while being subjected to shifting power relationships and responsive to complex accountabilities. In 1986, Hazlett identified a model for school-university partnership that held "promise for enduring effects" (Hazlett, 1986, p.192). That model required attitudes towards past power dynamics to be modified so that "mutually supportive working relationships" (p.193) could be developed, and partnerships where participants "function collaboratively as co-equals" (p.193) could be established.

Hazlett's (1986) model implicitly challenges a traditional relationship between universities and schools, and the traditional identities of researcher and practitioner. School-university partnerships necessarily intersect theory and practice. Participants cannot be experts presenting their knowledge: rather they need to be oriented toward building shared expertise,

and creating new learning identities, in multiple communities of practice (Tsui & Law, 2007). Engagement in partnerships can impact professional and personal identity (Moss, 2008). School-university partnerships are considered places where professional willingness to grow (Moss, 2008), alongside personal “perseverance” and “resolve” (Beckett, 2014, p.787), often drive the learning. Partnerships are viewed as alliances where new systemic knowledge, “and better professional practices” (Hargreaves, 2011, p.27) can be generated together. School-university partnerships create “spaces for interaction ... essential to the emergence of new insights and ideas” (Hipkins, 2011, p.3), and foster new types of relationships in an adaptive learning system.

Conceptualising school-university partnerships “as learning systems for all stakeholders” (Callahan & Martin, 2007, p.136) encourages thinking about the design of adaptive, flexible, and responsive infrastructure. The New Zealand Ministry of Education background policy documents for the *Investing in educational success* (2014a) initiative incorporate an understanding that “despite a culture that emphasises collaboration as a virtue ... our systems settings are not geared toward a deliberate, system-wide approach to ensure teachers can and do work together effectively” (Ministry of Education, n.d., p.2). The roles of kura, schools, and tertiary institutions (e.g., polytechnics, universities, wānanga) in enhancing or inhibiting the Ministry of Education’s “system-wide approach” (Ministry of Education, n.d., p.2). are not clearly outlined in the background for this initiative.

The history of school-university partnerships in New Zealand demonstrates that both schools and universities (along with other tertiary institutions) have had changing roles in partnerships over time. Consequently, the current notion of school-university partnership in New Zealand remains bound-up in historical and cultural understandings about the purposes of schools and universities, and the expertise each institutional partner is able to generate or provide to a partnership. Implicitly understood “learning systems” (Callahan & Martin, 2007, p.136) which operated in school-university partnerships of the past may need to be adapted to enhance New Zealand’s education system today.

1.3 Why study school-university partnerships?

School-university partnerships have been a part of initial and ongoing teacher education for over a century. School-university partnerships have also been the basis of extensive educational research. Consequently, the literature on school-university partnerships is vast. A broad expectation, underlying purpose, and perceived benefit of school-university partnerships “is that they offer a means of ending the fragmented approach to teacher education, professional development, and school improvement” (Bartholomew & Sandholtz, 2009, p.156).

Over time the literature related to school-university partnerships has continued to focus on the research interests in learning, pedagogy, and teacher education. There has been an assumption that the practice of partnership will result in improved quality or effectiveness in education – especially if research is directly linked to children’s learning experiences and teachers’ pedagogies (Tanner, 1991). Public research initiatives, such as the United Kingdom’s school-university partnership learning initiative in 2014, have been funded to explore the quality and impact of school-university partnerships. Most often, such research is undertaken with the aim of identifying strategies that indicate how to improve performance and implementation because “collaborative models were intended to improve the quality of teacher education” (Handscomb, Gu & Varley, 2014, p.13).

School-university partnership literature is dominated by qualitative case-study approaches that describe the richness of the contexts and conditions for partnerships. Descriptions of an array of school-university partnerships – their contexts, their dynamics, and their outcomes – exist in the literature. The complexity of partnership dynamics is regularly noted as a key element of the nature of partnerships. It is generally agreed that school-university partnerships offer opportunities to improve an education system, but they operate in contexts where “challenges continually emerge” (Walsh & Backe, 2013, p.602).

Institutional infrastructures and processes that could inhibit or enhance partnership are sometimes described as part of the richness of the contexts for school-university partnerships. Suggestions for improvement are usually focused on the way in which the partnership itself is structured and operates, rather than the ways partner institutions might better support partnership goals. While an underlying assumption is that school-university partnerships will provide something that will improve education – e.g., greater consistency, quality, or

effectiveness across the system – most researchers do not seek to explain how this will occur or how what is offered is new.

The term ‘partnership’ is widely used in New Zealand education – the terms professional learning partnership, home-school partnership, community partnership, school-university partnership are in regular use – and the social object (Engeström, 2005) of ‘partnership’ has drawn people together. Yet, the umbrella term implicitly assumes shared meaning-making schema when that commonality may not exist. Ideas that underpin current understandings of ‘partnership’ in New Zealand education are complicated: by unresolved historical debate about professionalism; by conceptual frames (Goffman, 1975; Lakoff, 2005) that may shape perceptions of identity and institutional expertise; and by a narrative of systemic improvement.

Currently, school-university partnerships in New Zealand engage participants in trans-institutional relationships within a system that is shifting toward more collaborative models of professional practice. This shift may place further demands on participant identities and institutional infrastructures. The recent focus from the Ministry of Education on a system-wide approach to support collaborative practice suggests that the current context for school-university partnerships in New Zealand may require a way of understanding ‘partnership’ that is rather different to how ‘partnership’ has been understood in the past.

1.4 Research intent

I have deliberately chosen to move away from qualitative case-study approaches, in order to seek a deeper understanding of what partnership might mean on a conceptual level. My interest in this research is the ways ‘partnership’ might be currently expressed as social facts (Durkheim, 1895/1964) by institutions – such as the Ministry of Education, universities, or schools. I intend to examine the implicit assumptions and key concepts which influence how school-university partnerships can be imagined and understood in context. An assumption I make is that institutions are organisations that frame (Lakoff, 2005), partly through organisational culture (Lincoln & Guillot, 2004), the ways in which partnership can be understood in context. Some of these understandings may be as:

- a community of practice (Tsui & Law, 2007);

- an interactional space essential for the emergence of innovation (Hipkins, 2011);
- a learning system (Callahan & Martin, 2007);
- a means to resolve systemic fragmentation (Bartholomew & Sandholtz, 2009);
- a means to promote systemic 'quality' (Handscomb et al., 2014).

I intend to provide an explanation about 'partnership'. Through explaining how 'partnership' and ideas that support notions of 'partnership' – e.g., working together, collaboration, cooperation, sharing, or community – might be currently conceptualised by institutions, I am hoping I will be led to new insights about why 'partnership' is important, and relevant to education in New Zealand. These insights could lead to improvements in how school-university partnerships are practiced because open social systems can be changed, and "people have the capacity to learn and change their behaviour" (Sayer, 2000, p.5).

The conscious decision to move away from describing or interpreting partnership experiences has resulted in a careful consideration of my research paradigm. I am seeking to notice the patterns and the conditions for emergence of 'partnership' in a system shifting toward fundamentally collaborative practice. A paradigm of complexity theory offered this research a means of accessing a systemic understanding of macro-trends as well as micro-interactions. Walby's (2003) assertion that complexity theory offers an opportunity for "the development of ontological depth that is not at the expense of explanatory power" (p.2) underpins my paradigm positioning.

I've also adopted a critical realist theorising methodology to steer me toward deeper concepts. Sayer (2000) argues that "thinking about what might or should be can also illuminate what is, by forcing us to ask searching questions" (p.157). The scope of my research is limited to a selection of publicly accessible documents on institutional webpages. Consequently, I've chosen not to adhere to a strict critical realist approach where mixed-methods, and triangulation of data, is advocated because it "covers its reality's several contingent contexts" (Sobh & Perry, 2006, p.1203). This means any explanation the research can provide is, at best, tentative.

Nevertheless, I have attempted to balance the limitations of the scope of data sample with a research method that supports delving deeply into the concepts expressed, and their underlying assumptions. I've chosen to complement the critical realist theorising methodology by utilising a method derived from critical discourse analysis. The method of political discourse analysis

(Fairclough & Fairclough, 2012) provides me with an opportunity to analyse the Ministry of Education's current focus on collaborative practice from the stance that it is part of an "argument for action" (Fairclough & Fairclough, 2012, p.30) intended to encourage behavioural changes which align more closely with the Ministry of Education's vision for the future. The research can be further complemented by critique considering the conceptual landscapes of 'partnership', the underlying schema expressed by different institutions (e.g., the Ministry of Education, schools, and universities).

The overarching intent of my research is to consider the conceptual landscapes of 'partnership', with a focus on school-university partnerships, in order to grow my own understanding of what conditions may support or undermine the aim of working collaboratively to enhance education.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

The overarching paradigm adopted in this study is one of complexity theory. This theoretical paradigm is oriented toward “better understanding the co-implicated dynamics of many overlapping, interlacing, nested systems” (Davis & Sumara, 2010, p.859). Adopting this paradigm has shaped the way the literature review was conducted.

The literature review has sought to consider complex interrelationships of multiple systems to uncover perspectives on, and about, school-university partnerships. While these systems are varied and vast, I have selected literature from three key fields – school-university partnerships, futures education, and initial teacher education – to identify themes that overlap and interlace. Key ideas from these fields can contribute towards understanding how educational institutions across the system frame thinking (Goffman, 1975; Lakoff, 2005) around the purposes of ‘partnership’. Equally, this provides broad scope to examine the extant assumptions and key concepts about how school-university partnerships are currently imagined and understood within the field of education.

2.1.1 Structure

Firstly, this chapter identifies historically agreed themes from the literature about partnership practices. It summarises and critiques extant understandings of three key elements in partnership practice.

Secondly, this chapter summarises the current context for ‘partnership’. It outlines some of the New Zealand government’s response to ideas within futures education discourse, and considers the implications for partnerships related to initial, and ongoing, teacher education.

Next, this chapter considers the concept of networked learning. It also considers the extant framing of participant roles and identities in a networked learning context. The ways in which stakeholders are anticipated to behave and produce networked knowledge is relevant to understanding ‘partnership’ conditions in the current education system.

This chapter then considers how partnerships are framed as sites for networked learning. It focuses on the intersection between theory and practice, and elaborates on what partner

institutions (schools and universities) may bring to partnership. The ways in which stakeholder institutions are anticipated to contribute to networked knowledge is relevant to understanding 'partnership' conditions in the current education system.

Finally, this chapter summarises how school-university partnerships are currently imagined and understood. It identifies scope for research, the issues that such research could address, and outlines my research question.

2.2 How is partnership practiced?

This section considers common understandings that have been presented in the literature about school-university partnership practice. The partnership studies reviewed have spanned the globe and considered schools, districts, colleges, and universities that branch into a broad range of socioeconomic and ethnic milieu. The review considers literature from the 1980s to the present. Agreed ways of thinking about partnership practice have been identified.

There is a body of literature that focuses on the structural features and outcomes of school-university partnerships. This literature links to an aim of identifying best-practice in school-university partnerships, and highlights 'what works'. There is also a body of literature which focuses on the nature and dynamics of partnership interactions. This literature usually presents accounts of challenges posed within school-university partnership practice and highlights common 'difficulties'. Together these two bodies of literature deal with the pragmatic realities of partnership practice – how to 'do' partnership.

The next sections highlight three key themes: reciprocity, commitment of resource, and responsiveness. The sections identify implicit assumptions that have not been thoroughly addressed in the extant literature.

2.2.1 Aim for mutuality and reciprocity

Goodlad (1988) states that partners are "joined intimately in mutually beneficial relationships" (p.14). While partnership goals across institutions can vary or conflict (Edens & Gilsinan, 2005), mutual purpose is a cornerstone for any partnership (Gardner, 2011). When establishing

school-university partnerships, discussion of mutual benefits, and how institutions and individuals might benefit from the partnership, is the “most important challenge” (Schuck, 2012, p.59).

Walsh and Backe (2013) identify that mutual benefit begins at points of confluence “defined by one partner's critical need and the other partner's capacity to respond” (p.596) and present the case that finding ways to connect the school and university through a common need enables partnerships to create reciprocal benefit. Bryk, Gomez, and Grunow (2011) explain that shared targets can create “cycles of joint accountability” (p.136) that support mutuality. Craddock and Dodgson (2009) acknowledge that partnerships “work best when relationships are developed over time, are strategic and support the missions of universities, colleges and schools involved in a targeted way” (p.6). Baumfield and Butterworth, (2007) suggest that the negotiation of a partnership identity, that doesn't so much ‘bridge’ divisions as ‘bond’ participants and institutions, creates mutuality. Additionally, Miller (2015) suggests partnerships should develop and safeguard their own core beliefs, separate to their institutions, in order to maintain a shared focus on mutually beneficial processes.

More than identifying shared needs, strategic outcomes, and processes enabling collaborative action, the concept of reciprocity is presented in Schuck (2012) as “empowerment ... attributable to the partnership” (p.57). Reciprocal benefit may be achieved through developing interpersonal sensitivity, respect, understanding, and “mutual informing and critiquing” (Moss, 2008, p.348). Hargreaves (2011) warns that “partnership can easily become a soft, warm and cuddly process of unchallenging relationships between professionals to achieve some modest outcome” (p.22) and highlights the need for critique and challenge to be a central element of partnership. In partnerships where diverse ideas and contributions are “valued and treated as equal, perceived not as barriers but differences that stimulate” (Taylor, 2008, p.84) the reciprocal benefit can be derived from the learning processes as much as the defined partnership goals.

Understandings of mutuality and reciprocity expressed in the literature are underpinned by the question, ‘What might we achieve and learn together that is different from what we might achieve or learn alone?’ Asking this question at the institutional level, at the leadership level, and at the level of partnership participants, supports building a collective and systemic agenda.

A multi-layer approach to partnership goals and structures (Gardner, 2011) allows for policy coherence, an exploration of shared interest, and negotiation of shared resource.

The literature readily discusses the functions and cultures of specific school-university partnerships to present 'what works' and 'difficulties' in developing mutuality and reciprocity. Nevertheless, the institutional cultures or structures of partner organisations that support partnership operations are not as thoroughly addressed. There are descriptions of varying difficulties within partner organisation processes and cultures (Benade, Hubbard & Lamb, 2017; Schuck, 2012; Zhang, McInerney & Frechtling, 2011). Day (1998) concludes that institutional cultures affect partnership practice. Gardner (2011) reports that challenging common workplace norms means practices that promote partnership reciprocity "often take years to become embedded" (p.65).

Descriptions in the literature do not address in depth the impact of specific internal structures (operational or cultural) of the institutions who engage in partnership. This signifies that a deeper understanding of how institutions represent themselves as partner organisations may be relevant to considerations of how mutuality and reciprocity can be achieved.

2.2.2 Commit time and resources

Partnerships may be "popular with policy makers as they can be a means of delivering more with less by making better use of existing resources and adding value by bringing together complementary services" (Baumfield & Butterworth, 2007, p.415). Nevertheless, both policy and funding support available to school-university partnerships are subject to dynamic institutional and political directions.

"Time is a critical resource in the development of sound collaborations" (Bickel & Hattrup, 1995, p.50) partly because of the necessity to develop relational trust, but also to secure ongoing commitment. Segedin (2011) notes that participants were hesitant to engage because of perceived time commitments. Schuck (2012) describes the time-consuming nature of partnership processes:

The hands-on contribution by all partners required a large commitment of time. Regular face-to-face meetings and frequent telephone and email contact proved necessary to ensure follow-up of tasks and successful

presentations. At times, the amount of time seemed onerous in the context of the partners' other work demands. (p.56).

Schuck (2012) also identifies how, during the partnership, participants were instructed to minimise the time they devoted to a project in order to meet other institutional aims. Tsui and Law (2007) support building partnerships incrementally, so that the "object of partnership as an activity system was transformed" (p.1292) and reconceptualised as unified and seamless professional development. Investing sufficient time, on both an operational level and on a relational level, is vital to partnership success.

Partnerships may need to re-secure partner institutional commitments if new needs are prioritised, as Bickel and Hattrup (1995) recognise "a worthwhile cause does not guarantee continuing commitment" (p.44). Despite advocating the benefits of partnership, Hargreaves (2011) acknowledges that partnerships do incur "transaction costs - the time, energy and resources necessary to keep the partnership alive and well" (p.22). The need to be flexible, and adapt the partnership's operational commitments and accountabilities, is mirrored in the need to negotiate mutable commitments and accountabilities of participants. Huxham and Vangen (2005) acknowledge that seeking advantage through partnership "is a seriously resource-consuming activity" (p.13). There is consistent recognition that school-university partnerships require an ongoing investment of time and resource, not just to maintain the partnership itself but to create the conditions for the emergence of "sustainable changes" (Ministry of Education, 2014b, p.7).

It is interesting that the literature does not seem to indicate any renegotiation of participant roles within their partner institutions. Schuck (2012) explains how participants felt pressure within a partnership "imposed on us by the institutional requirements" (p.52) of employers, where there was a need "to ensure we were fulfilling our commitments to our employers in preference to our commitments to the project" (p.55). For school-based educators, the capacity to renegotiate roles with their employers is not easy in environments where 'face-to-face teaching' must be prioritised. Beckett (2014) explains how teachers in a school-university partnership "continued to find the necessary time for joint meetings on campus but also in school, as well as intellectual activities such as reading and reviewing" (p.792) due to their commitment to the learning partnership, rather than a negotiation of their roles within schools.

Thus, while the conditions for emergence of “sustainable changes” (Ministry of Education, 2014b, p.7) require a systemic commitment of time and resource, one resource utilised extensively is the passion and commitment of participants, managed in addition to their current conditions of employment. The underlying implication is that school-university partnerships are not core business in either schools or universities.

2.2.3 Remain flexible and responsive

Dynamic relationships are expressed in the literature as an undesirable but inevitable factor of a school-university partnership. Being adaptable to emerging opportunities, and flexible to changing needs (Schuck, 2012), is important because “the initial design of the partnership’s infrastructure ... often changes” (Walsh & Backe, 2013, p.601) as partnerships develop.

The relationship of individuals to the accountabilities of the partnership, and to the accountabilities of their own institutions, is fluid. Participants can be committed to the partnership but “are not immune to competing professional pressures” (Walsh & Backe, 2013, p.604) and may be “required to ... revert to more traditional roles” (Schuck, 2012, p.51) during a partnership. Mutable personal or professional accountabilities within school-university partnerships are described in the literature.

Partnership participants utilise interpersonal skills to remain flexible and responsive. The literature commonly uses terms such as ‘open discussion’, ‘critical discussion’, ‘honest feedback’, and ‘reflective practice’ alongside descriptions of communication requiring high levels of sensitivity and trust (Beckett, 2014; Miller 2015; Moss, 2008; Schuck, 2012; Walsh & Backe, 2013). The strength and responsiveness of interpersonal relationships are important to partnership success.

Partnership participants can be collectively responsive to needs they identify (Beckett, 2014) rather than to top-down accountabilities. This indicates that there is a level of empowerment derived from remaining responsive to emerging possibilities within partnership interactions. Nevertheless, while “co-construction rather than power” (Walsh & Backe, 2013, p.600) appears to support partnership collaboration, top-down accountabilities do not always inhibit the participant’s sense of empowerment. Segedin (2011) concludes that despite partnership

methods being “riddled with accountability” (p.55), participant’s still felt empowered to be “change agents” (p.54).

The literature focuses on participants navigating the challenges of partnership practice and, in doing so, seems to divests partner organisations of much responsibility for partnership outcomes. The fluidity of the school-university partnership dynamic, which perpetuates “a system of shifting supports” (Gardner, 2011, p.74), means the “onus for successful interpretation and implementation” (Auld & Morris, 2016, p.222) rests with the participants actively engaged with the partnership processes. “Invoking *the burden of implementation* focuses responsibility for the success” (Auld & Morris, 2016, p.223) on the people participating in the partnership. Thus, successful partnership outcomes rely heavily on the capacities of individuals to manage and adapt to changes. Underpinned by democratic notions of empowerment and distributed leadership, this negates questioning whether the collaborative learning will lead to something ‘better’ in the specific context, and instead focuses participants on negotiating the pragmatic realities of their complex interactions.

The best-practice of remaining flexible and responsive is balanced by the common challenge of navigating dynamic relationships. This balancing act is also apparent in literature describing ‘effective leadership’ in partnership. There seems to be an underlying assumption that partnership participants will have the capacity to negotiate complex interactions simply because they are empowered to do so.

2.3 The partnership context

This section details the context for ‘partnership’ that has been espoused in educational futures literature. This context relates to school-university partnerships because it argues that the dominant social, economic, and political structures that have supported education systems since the industrial revolution are redundant. Responses attempting to ‘future-proof’ the education system in New Zealand have included incentivising initial teacher education programmes that provide stronger partnership relationships between the tertiary and school sectors.

The next section outlines some of the key points of educational futures discourse and highlights some of the Ministry of Education's motivations to move the education system toward the type of futures suggested in the literature. It goes on to identify challenges to the purposes of teacher education and to participant identities that are implied through the context of educational futures literature.

2.3.1 The future of education

The Ministry of Education's *Investing in Educational Success* (2014a) initiative aims to promote system-wide collaborative learning in order to enhance education in New Zealand. This Ministry of Education initiative invests significantly in resourcing opportunities for greater collaboration within the education sector. The investment of these resources is informed, in part, by the concept of a high-performing education system (Ministry of Education, n.d.):

High performing systems provide high quality teacher education; mentoring that continually improves learning and teaching; view teachers as researchers; and promote effective teachers, giving them greater responsibility for the continual improvement of learning and teaching. These systems recognise that developing teaching and learning is time intensive and make provision for professional learning opportunities. (p.1).

The Ministry of Education's ambition to be a high-performing education system has multiple motivations, one of which is to 'future-proof' the system and provide assurance to New Zealanders that "our system remains relevant – ensuring students have the skills, knowledge and attributes necessary for success in the 21st century." (Ministry of Education, n.d., p.4).

Literature about educational futures argues that current education systems are incapable of meeting the future needs of societies. This literature emerged largely in the late 20th century, and the main argument has continued for two decades. The literature argues a need for education systems that are responsive to a range of wider societal trends, including:

- the 'digital revolution' resulting from the introduction of new technologies (Brynjolfsson & McAfee, 2011, 2014; Levy & Murnane, 2005);
- globalisation, changing economies, and the nature and distribution of employment opportunities (Cheng, 2016; Cheng & Yip, 2006; Marginson, Kaur & Sawir, 2011);
- 'networked knowledge' required for rapid adaptability to the Anthropocene and other complex problems (Brondizio et al., 2016; Pattberg & Zelli, 2016);
- demographic shifts including the aging population and migration (Bacchetta, Ekkehard, & Bustamante 2009; Flahaux & De Haas, 2016).

Collectively, these societal trends challenge dominant social, economic, and political structures that have propagated, and perpetuated, education systems of the past. A '21st century' education system is characterised as flexible and adaptive. These systems are agile when confronting continuous change, responsive to emerging trends, and able to utilise networked knowledge with ongoing feedback for systemic improvement.

The literature is based on the assumption that the future is uncertain and unknowable, so the education system preparing people for the future must necessarily be open to change, adaptation, and innovation in order to remain relevant. The concept of a 'known' or 'knowable' future that education systems prepare people for has been replaced with understandings of volatile, uncertain, complex, and ambiguous futures. Knowledge building, knowledge creation (Bereiter & Scardamalia, 2012, 2014), and judgement through human agency (Biesta, Priestley & Robinson, 2015; Gordon & Rajagopalan, 2016) are key considerations for education. It is argued that '21st century' citizenry needs to construct and apply knowledge to attend to complex problems in situated practice, often in collaborative or cross-disciplinary environments.

In New Zealand, there has been extensive government investment in infrastructure to support the aims of a '21st century' education system. New school builds have adopted flexible and adaptable learning environments, and ultrafast broadband is becoming ubiquitous in schools. There has also been government investment in digital infrastructure, such as the Network for Learning, that is intended to make "a significant contribution to improving educational outcomes" by supporting "the transformation of all NZ schools" (The Network for Learning, 2016, para.1) and empowering education to become future-ready. Nevertheless, the 21st Century Learning Reference Group (2014) acknowledges that: "New buildings, new technologies, mobile devices and innovative applications will not improve learning on their own. Students, teachers and leaders must adapt their practices to make best educational use of these investments." (p.13). Equally, Gilbert and Bull's (2015) research concludes that policymakers will be required to "balance resource allocation between the system's 'hardware' [infrastructure] and the 'software' [people] needed to give the hardware its functionality" (p.12).

Educational futures literature has at its heart a change narrative whereby the inherent unpredictability of future social, economic, and political structures necessitates a new way of conceiving the purpose of education systems. The action of educating for the new purpose

suggests participants require more complex understandings of 'knowledge' (Gilbert, 2005) and that "collective responsibility for understanding" (Scardamalia, 2002, p.68) interlaces with traditional ways of regulating intellectual activity. The capacity of the network to be responsive, concurrently at systemic and localised levels, is derived from the interactions within the network rather than solely from its entities, or objects. The agency of individuals operating within the network becomes more complex as their interactions define their capacity to contribute to wider systemic learning, and their overlapping identities interact concurrently in several spaces. This way of understanding agency, identity, and knowledge underpins the educational futures literature.

The implications of educational futures literature for the area of teacher education (both initial and ongoing teacher education) are profound. Teacher education is a common context for school-university partnerships. The education systems preferred within educational futures literature require conceptual shifts related to the role of a teacher and the function of teaching. The ideas of networked knowledge challenge concepts that teachers' work is largely an autonomous enterprise, drawing upon individual expertise with content and pedagogy. The systemic improvement narratives challenge functional responsibilities, inasmuch as teachers are not only responsible for ensuring the learning of the young people in their classrooms but actively contribute to the consistency, quality, and effectiveness of the system as a whole. In an environment where the quandary of 'teaching as a craft' or 'teaching as a profession' remains moot, overlaying new frameworks for understanding teacher roles and identities increases complexity, and presents challenges for our understandings of the purposes of teacher education.

2.4 Networked learning

Concepts of networked knowledge necessitate a means of understanding the functional roles and responsibilities of participants, especially where it is envisioned that those participants contribute to the consistency, quality, and effectiveness of the whole system. This relates to school-university partnerships in New Zealand because the Ministry of Education, motivated toward continuous improvement of learning and teaching (Ministry of Education, n.d.), has incentivised initial teacher education programmes that promote strong relationships between

initial teacher education providers and schools to “develop our collective knowledge base” (Ministry of Education, 2013, para.15).

The next sections consider school-university partnerships “as learning systems for all stakeholders” (Callahan & Martin, 2007, p.136) highlighting key ideas of complexity and emergence. They go on to review how participants, such as teachers and leaders, are framed in the literature and what relationship this framing has to ‘partnership’ oriented meaning-making schema.

2.4.1 Networked learning systems

At the turn of the century, use of the term ‘web 2.0’ began to emerge. The fundamental change that ‘web 2.0’ heralded was a greater capacity for collaboration via digital media. Through ‘web 2.0’ technologies the “whole community [is] contributing to the ontology in some way” (Sebastian, Noy, Tudorache & Musen, 2008, p.318). In the information sciences, the network and network connectivity is a central theme. In a world of knowledge engineering, “ontologies become dynamic products of collaborative development rather than artifacts produced in a closed environment” (Sebastian et al., 2008, p.318). The capacity of ‘web 2.0’ technologies to produce dynamic products, rather than artefacts, reframes previously closed understandings, envisioning knowledge “as a resource to do things with, not an object to be mastered” (Bolstad & Gilbert, 2008 p.38). It shapes an ontological understanding of the world as, and in, a constant process of ‘beta-testing’.

Similarly, the learning systems of school-university partnerships can be understood as being in a state of ‘beta-testing’. Learning can link to both school improvement and academic research (Hargreaves & Fullan, 2012; Segedin, 2011). Universities and schools collectively develop dynamic knowledge products, assume responsibility for enhancing education systems, and generating professional capital (Hargreaves & Fullan, 2012). This learning process where the “whole community [is] contributing ... in some way” (Sebastian et al., 2008, p.318) presents institutional and personal challenges to traditional knowledge authority. In order to adapt to the challenge that collective learning implies (e.g., to concepts of knowledge authority), Hargreaves and Fullan (2012) advise stakeholders to aim “to do things that bridge the chasm [between

schools and universities], reach for partnership, and replace polarization with interaction” (p.153).

Conceptualising school-university partnerships spaces for collaborative interaction and “as learning systems for all stakeholders” (Callahan & Martin, 2007, p.136) requires supportive infrastructure – for instance, shared goals, effective leadership, and adequate time (Arhar et al., 2013). It also requires adaptive processes for creating, retaining, and transferring knowledge to ensure the learning within the partnership, and the learning of its institutions. Edens and Gilsinan (2005) state that institutions benefit from relational webs, “particularly those webs that bring together people who might otherwise not form relationships” (p.124). Moss (2008) describes how through partnership “possibilities for professional action are created for teachers and university academics alike” (p.346). Commitment to the partnership’s focus (Beckett, 2014), and leadership that “values actions over bureaucratic regulations” (Carlson, 2001, p.84), encourages sustained learning.

While it is anticipated that school-university partnerships operate in environments where “challenges continually emerge” (Walsh & Backe, 2013, p.602), this is often accompanied by a caveat that remaining flexible, and adaptable to changing circumstance, will be beneficial to partnership processes or outcomes (Benade et al., 2017; Cordingley, Baumfield, Butterworth, McNamara, & Elkins, 2002; Schuck, 2012). The assumption is that change is a certainty. The implication is that the capacity of the partnership structures to adapt quickly to the change, or exapt using an old structure or process in a novel way, is a means by which partnerships can navigate an inherently challenging dynamic. Stakeholders negotiate the conditions that support this learning system, and participants “enact collaborative implementation processes” (Gardner, 2011, p.74) to create, retain, and transfer knowledge. In order to build the partnership bridge and learn together, partnership participants seem to need to navigate conflicts between cultures (Day, 1998), identities (Moss, 2008), experiences (Nelson, 2006), and purposes (Schuck, 2012). In such contexts, the “human story behind partnerships is about a set of personal commitments that make partnerships viable” (Gardner, 2011, p.80). This approach to a learning system aligns, to some degree, with a systemic improvement discourse where narratives of change are linked to concepts of participatory empowerment, and the strengthening of relationships between elements of a system.

Envisioning a school-university partnership as a learning system draws predominantly from complexity theory. The idea of ‘emergence’ – what happens when elements in a system combine in unique ways to create something different from ‘the sum of the parts’ – is central to the promise of an adaptive learning system where new “possibilities for professional action” (Moss, 2008, p.346) can arise. Complexity theory emphasises multi-dimensional relationships and dynamic interactions between elements of a system, rather than linear cause-effect processes (Urry, 2005). An adaptive system changes behaviour in relation to its environment: it is an open system influenced by multiple factors. “If a complex system is taken apart, key aspects of how the system works and what makes it work in the first place are lost since unexpected consequences arise as a result of the dynamic interactions of parts” (Cochran-Smith et al., 2014, p.107). Noticing what is happening at a systemic and local level, focusing on watching what the system is doing, and nudging it in different directions, can create better conditions for the emergence of something new (Garvey Berger & Johnston, 2015). The unique combination of elements cannot be mandated or predicted, so enhancing the number and quality of interactions – reaching for partnership – increases the probability that emergent phenomena might occur.

The literature frames adaptive learning systems as both challenging and rewarding (Schuck, 2012; Segedin, 2011; Tsui & Law, 2007) but does not appear to identify the adaptive processes for creating, retaining, and transferring knowledge. As yet, the literature does not seem to investigate how stakeholders might be able to act intentionally in a complex adaptive system.

2.4.2 Networked learning and teacher identities

The current New Zealand Ministry of Education trend toward collaborative practice adopts a ‘web 2.0’ metaphor of a network, where “our collective knowledge base” (Ministry of Education, 2013, para.15) is dynamically utilised and continually improves learning and teaching. Nevertheless, similar ideas of networked practices were anticipated within Dewey’s writings about the relationship between democracy and education. Dewey’s (1916/2011) description of the democratic community a century ago has a strong connection with current ideas of collaborative networks:

The extension in space of the number of individuals who participate in an interest so that each has to refer his own action to that of others, and to consider the action of others to give point and direction to his own. (p.64).

This historical connection is important. While the current trend in New Zealand education toward collaborative practices can be understood in terms of a neoliberal agenda – where *Tomorrow's Schools* policies and the *Quality Teaching Agenda* are precursors to the current Government's *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative – this trend can also be understood through a lens of the 1930s debate in New Zealand education, where democratic principles underpinned the purposes of state education for all. This connection can assist in understanding that the current trend toward collaborative practices shares, in part, an underlying debate about teacher identity.

The capacity to engage in dialogue, reflect, and build knowledge together with experienced colleagues – collectively thinking aloud (Hattie, 2016) – is part of a reframing of teacher identities. Extant in the literature are ideas of 'teacher as expert' (Furlong, Barton, Miles, Whiting, & Whitty, 2000), 'teacher as clinician' (Kriewaldt, McLean Davies, Rice, Rickards, & Acquaro, 2017), and 'teacher as researcher' (Beckett, 2014; Loughran, 2002; Segedin, 2011). These identities support teachers to critically analyse theories of teaching; how they think and know about how students learn (Hattie, 2016). J. Furlong (2014) notes that this process "needs to be sustained throughout teachers' professional careers, so that disciplined innovation and collaborative enquiry are embedded within the professional culture" (p.8).

A requirement of graduating teachers entering the profession in New Zealand is to "systematically and critically engage with evidence to reflect on and refine their practice" (Education Council of Aotearoa New Zealand, 2015a, p.1). Registered teachers in New Zealand meet the criterion to "use critical inquiry and problem-solving effectively in their professional practice", in part, by evidence that they "engage with evidence and professional literature" (Education Council of Aotearoa New Zealand, n.d., *Practising teacher criteria*, para.20). These requirements suggest a systemic model of teacher identity that clearly positions teachers as active and reflective learners.

For early-service education, the provisional certification period for New Zealand teachers, development of teacher identity is more fully realised in school-based contexts. Early-service

teachers, or teachers returning to the profession, are provided with mentoring support from a fully-certified colleague (Education Council of Aotearoa New Zealand, n.d., *Induction and mentoring*, para.1) with an aim to co-construct reciprocal professional learning (Education Council of Aotearoa New Zealand, 2015b). Kemmis, Heikkinen, Fransson, Aspfors and Edward-Groves (2014) conclude that the nature of early-service mentoring and the associated practice architectures which underpin the model of mentoring “is not just a choice of a mode of induction, it is a choice about the kind of world and the kind of profession a new teacher is inducted into” (p.163).

As a profession, ongoing professional learning is essential for New Zealand teachers. This is a responsibility, as part of the practising teacher criteria, and acknowledged in collective agreements that “in addition to their normal class contact time” (New Zealand Educational Institute, 2016, p.10) teachers will undertake professional learning. Under the Secondary Teachers’ Collective Agreement, it is also a responsibility of a Board of Trustees that the “employer shall provide reasonable opportunities for appropriate and effective professional development for all teachers” (PPTA, 2015, p.12). Thus, the responsibility for ongoing professional learning, while being mandated as an individual teacher’s responsibility, is supported by a range of employment conditions. Alton-Lee (2008) highlights that “for ongoing, outcomes-focused professional inquiry and learning in schools ... conditions include enabling teachers to process new learning with others and providing teachers with multiple opportunities to learn and apply their new understandings in practice” (p.3).

The discourse around ongoing teacher education and professional learning over the past twenty years highlights the identity concept of ‘teacher as learner’ (Boyd, 2005; Garmston & Wellman, 1998; Robinson, 2007; Smith, 2008). Furthermore, the literature highlights a collective identity and professional responsibility as networked communities of learners (Cochran-Smith & Lytle, 1999; Elmore, 2004; Jaquith, Mindich, Wei & Darling-Hammond, 2010; Timperley, 2008). A collective professional identity, involving continuous learning together, is a strong contrast to a teacher archetype of ‘sage-on-the-stage’ where professional expertise is derived from knowledge authority and pedagogical autonomy. There is alignment in both research and policy with this collective identity concept of teachers as communities of learners, that possibly does not yet exist in practice.

Worth noting are the considerations of Evans (2011) and Barth (2006) who present a case that teachers and school leaders need to focus on deeper learning relationships, where relational trust and open-to-learning orientations are strengthened (Robinson, n.d.; Robinson, Hohepa, & Lloyd, 2009). The difference between congenial and collegial relationships in schools is important for orienting a professional identity toward being a community of learners. The congenial relationship is friendly and pleasant, whereas the collegial relationship is about growth and development (Barth, 2006; Evans, 2011). Pawlowski (2007) argues that moving toward true collaboration entails identifying reciprocities, overcoming the assumption that critique is criticism, and relinquishing the fear of losing control. Egizii (2015), along with Fullan and Quinn (2016), frame the process of building a collective culture as a leadership function but acknowledge that the work of collaboration is neither easy nor final, it is a continuous journey. Hayden, Moore-Russo and Marino (2013) argue that there are benefits to undertaking this journey, as reflective practice can be a catalyst for transformative change in teaching practice. "Teachers' willingness to discuss with colleagues, question themselves and reflect on their practices enables them to grow in confidence, be open to new ideas and practices, and strive for the best learning outcomes" (Nolan & Molla, 2017, p.17).

The professional identities of 'teacher as learner' and 'community of learners' coexist with other current concepts of teacher identity, such as 'teacher as expert', 'teacher as researcher' and 'teacher as clinician'. Underpinning all of these identity concepts is a sense of 'professionalism' – the idea that the teaching process requires making informed judgements and decisions relative to context and circumstance (Hattie, 2016; Hargreaves & Fullan, 2012). Nevertheless, there remain implicit meanings and values associated with ideas of 'learning together' and being a 'learner' that do not accurately, or easily, align with ideas of possessing the autonomy and expertise of a 'professional' – especially as this is conceived of in teaching. Thus, knowledge networks and the impetus behind collaborative practice are a challenge to any idea of the autonomous professionalism of teachers in the education system. Ideas of teacher professionalism which have existed since the 1930s are being reframed with an emergent concept of a collective of interdependent learners.

Sneddon (2015) surfaces issues that can arise from assuming teachers understand this complex identity and explains "there are no pre-existing regulatory frameworks or governing

practices” (Sneddon, 2015, p.541) that enable agents to engage as a collective, thus “actors draw on different epistemic and experiential resources as they negotiate the terms, conditions and effects of participation” (Sneddon, 2015, 541). For school-university partnerships, where boundary crossing (Tsui & Law, 2007) in a complex, networked environment is a key to success this indicates that framing teacher identities *for* networked learning may require a new set of epistemological tools to support teacher participation.

2.4.3 Networked learning and effective leadership

A consistent theme of effective leadership is evident in literature that focuses on best-practice in school-university partnerships (Bryk et al., 2011; Firestone & Fidler, 2002; Walsh & Backe, 2013). The conditions for emergence of “sustainable changes” (Ministry of Education, 2014b, p.7) are highlighted in the literature focused on school-university partnership best-practice. The leadership of, and within, the school-university partnership is regarded as essential for success. Boyer (1981) argues that “the need for school/college collaboration urgently persists” (p.1) and presents a case for education leaders from both communities to come together to strengthen the relationship between institutions. Similarly, the British National Council for Educational Excellence (2008) recommendations identify that “we want leaders at all levels to be able to share and learn from each others’ experience, and to form partnerships that reflect their particular priorities and needs” (p.14). The Ministry of Education has resourced expert partner roles and new practitioner leadership roles have been “established to support collaboration and effective practice” (Ministry of Education, 2014b, p.2) which indicates the Ministry of Education values how “leadership expertise is developed and utilised ... across the system” (Ministry of Education, 2014b, p.7).

Effective leadership within the contexts of school-university partnerships is usually presented as distributed (Bickel & Hatrup, 1995) or emergent (Hudson, English, Dawes & Macri, 2012). Leaders encourage the necessary “level of autonomy to develop and grow the partnerships” (Schuck, 2012, p.59) when they can: work across institutional boundaries (McLaughlin & Black-Hawkins, 2006); tolerate ambiguity (Baumfield, 2001); morally champion partnership aims and secure followership (Bryk et al., 2011); and allow for struggle and risk taking (Seddon, Billett & Clemans, 2005).

Nevertheless, there is an acknowledgement that without “shared understanding, distributed leadership can easily become dispersed leadership with the chaos, isolation, or conflict that may follow” (Firestone & Fidler, 2002, p.451). Bryk et al. (2011) explain that in networked improvement communities “a small number of opinion leaders played a critical role ... for organizing the rules of the game” (p.154) and conclude that these networks are not self-organising systems, instead relying on strong leadership. Tensions between concepts about what equates to ‘effective leadership’ in school-university partnerships are echoed in Segedin’s (2011) conclusions that “accountability and empowerment simultaneously exists in school-university partnerships” (p.55).

Effective leadership is important to best-practice in partnership, and to support the conditions for networked learning. It is assumed that there is a negotiation of what that leadership means in context; that leaders negotiate both their own and others’ accountability and empowerment within a partnership. How leadership roles within partnership are affected by implicit institutional or political expectations of ‘leaders’ does not seem to be discussed in the literature reviewed.

2.4.4 Networks and transformational learning

Constructing professional capital (Hargreaves & Fullan, 2012) occurs at the interface between person and practice, but also in the continued partnerships between schools and universities who, “pool their collective intelligence, and grow a professional knowledge base” (Beckett, 2014, p.792) greater than either institution could achieve alone. Partnerships create “spaces for interaction” (Hipkins, 2011, p.3) from which new understandings can emerge. School-university partnerships are conceptualised as spaces where learning occurs (Callahan & Martin, 2007). This necessitates partner institutions, and participants, enter into school-university partnerships with some orientation toward learning together.

Partnership participants learn together while their roles and identities are challenged, contested, and critiqued (Tsui & Law, 2007; Miller, 2015; Moss, 2008). Nevertheless, the school-university partnership literature reviewed does not show that partner institutions have explicit orientations toward learning together, nor that a partnership might result in any change to overarching institutional processes. While school-university partnerships are conceptualised as spaces

where participant learning occurs, any wider institutional learning is not foregrounded in the literature. Instead, the capacities and orientations of partnership participants to engage in learning collaboratively are highlighted.

Learning in school-university partnerships is driven by participants (Gardner, 2011; Hudson et al., 2012). Learning is not about acquiring knowledge, but about generating knowledge (Beckett, 2014; Moss, 2008; Hargreaves & Fullan, 2012) and about noticing opportunities for “better professional practices” (Hargreaves, 2011, p.27). Literature about the nature and dynamics of school-university partnerships has been influenced by concepts of transformational learning, where participants engage in boundary-crossing and negotiation of roles and identities. In transformational learning theory (Mezirow, 2000) the central learning process is one where individuals become critically aware of their contexts, beliefs, and feelings, to change the way they tacitly structure their expectations and assumptions.

Such transformational learning is, essentially, a process of changing the form of a meaning-making schema. School-university partnership literature does not seem to address explicit supports or scaffolds for participants undertaking this process, especially in contexts where institutional pressures may pull them in other directions (Beckett, 2014; Schuck, 2012; Miller, 2015). Perspective transformation involves seeing the world from a new vantage point; observing what was once internalised as a self-evident truth to be qualitatively different and being able to critique its truth rather than assume it. Kegan (1994) presents a theory where there are five orders of mind, each involving a qualitatively different reality construct. Kegan (1994) supposes a progression of wider perspective taking with each order of mind. Garvey Berger (2007) explains that Kegan’s theory “allows us to examine the *fit* between people’s capacities and the demands made upon them” (p.3). While Goodlad (1988) identifies “it may be necessary to develop mechanisms ... to achieve a better fit between individuals and institutional settings” (p.5), there appears to be no further indication in the partnership literature that the ‘fit’ between the capacities of partnership participants and the demands made on them in partnership practice is a consideration in the formation, or continuation, of school-university partnerships.

The literature on the nature and dynamics of school-university partnerships describes situations that require complex meaning-making schema from participants. Arhar et al. (2013) note the

importance of the “development of social and intellectual skills needed for collaborative work” (p.219). At the very least, partnership situations demand an ability to see different systems and their interactions from the perspective that these can be authored, influenced, and managed by participants. These situations demand that a participant “refer his own action to that of others” and “consider the action of others to give point and direction to his own” (Dewey, 1916/2011, p.64). Viewing school-university partnerships as “learning systems for all stakeholders” (Callahan & Martin, 2007, p.136) also seems to demand an ability to see and structure meaning within and from the dialectical inter-institutional relationships.

How school-university partnerships might manage these demands on the meaning-making schema of participants does not seem to be considered in the literature, except at the very general level of noting that “trust, communication, and other ineffable partnership qualities [are] emerging factors that promote and prevent partnership viability and sustainability” (Gardner, 2011, p.82).

2.5 Partnership at the intersection of theory and practice

Initial teacher education is a function of many school-university partnerships. Understanding the roles and responsibilities of institutional partner organisations (schools and universities) can relate directly to how partnership interactions may be formulated and shaped.

In a new space for interaction – an intersection of theory and practice – the expertise each institution is anticipated to provide to a partnership may not be explicit. Equally, understanding the responsibilities of representative roles from each institution has implications for how school-university partnerships are negotiated and can be imagined. This relates to school-university partnerships in New Zealand because the Ministry of Education, motivated toward a “system-wide approach” (Ministry of Education, n.d., p.2), has incentivised initial teacher education programmes that promote strong relationships between initial teacher education providers and schools.

The next sections consider the idea of ‘boundary crossing’. They continue by considering what each institutional partner might ‘bring to the table’ when engaging in school-university partnerships.

2.5.1 Institutional boundary crossing

In the context of school-university partnerships, the dynamic positioning of participants as bringing expertise and behaving as learners (Tsui & Law, 2007) seems to require participant interaction at the intersection of theory and practice. An orientation toward learning is imperative for participants operating at the intersection of theory and practice, where stakeholders view the partnership itself as a means to contribute to and improve wider professional knowledge (Davies et al., 2015; Tsui & Law, 2007).

The school and the university, as institutional participants, are also anticipated to learn and change (for the better) from generating new knowledge within the partnership (Bickel & Hatrup, 1995; Davies et al., 2015). Partnerships position institutions as sharing responsibility for the learning (Hargreaves & Fullan, 2012). The intersection between theory and practice, where no stakeholder has a deep knowledge or awareness, becomes the site where new professional knowledge and awareness is generated (Tsui & Law, 2007). The idea of shared systemic knowledge generation is apparent in a range of literature (Darling-Hammond, 2006a, 2006b; Fullan & Quinn, 2016; Hargreaves & Fullan, 2012; Segedin, 2011).

The concepts of 'boundary crossing' (Gardner, 2011; Miller, 2015; Tsui & Law, 2007), and flexible approaches to roles and relationships (Bickel & Hatrup, 1995; Moss, 2008; Nelson, 2006; Segedin, 2011; Tsui & Law, 2007), are presented as prerequisite for partnership collaboration. Tsui and Law (2007) suggest that school-university partnerships can be designed to push perceived professional boundaries, create new learning identities, and allow participants to "engage in expansive learning ... through crossing community boundaries and collaborating with members of other communities of practice" (p.1300). Similarly, Bickel and Hatrup (1995) explain how "effective collaboration requires breaking out of traditional roles and relationships" (p.47). Deconstructing traditional academic boundaries (Carlson, 2001) to "support reciprocity and the free exchange of ideas, connect theory and practice, promote collegiality and honest talk, and provide opportunities to try out ... with supportive feedback" (Miller, 2015, p.25) fosters understanding of partnerships as learning systems. This suggests that the identities of teacher-educators, researchers, teachers, and school leaders, are negotiated in partnership practice. At

an institutional level, such negotiation and crossing of community boundaries may require re-evaluation of institutional structures that implicitly support the maintenance of those boundaries.

However, the “sustainable changes” (Ministry of Education, 2014b, p.7) in education and collaborative approaches presented in teacher-education literature (Darling-Hammond 2006a) do not seem to expect any alteration of underpinning cultures, structures, or processes in tertiary faculties of education. Instead, the impact of partnership learning is anticipated to be directly noticed through the work of school-based educators in the achievement of students in schools (Darling-Hammond & Rothman, 2011). The literature highlights that school leaders, school teachers, and schools are anticipated to lead or enact change (Darling-Hammond & Rothman, 2011; Ministry of Education, n.d.), while teacher-educators, researchers, and universities are implicitly positioned as catalytic forces (Bickel & Hatrup, 1995) in the process of generating “sustainable changes” (Ministry of Education, 2014b, p.7) in education. This is despite the case-study research of Zhang et al. (2011) indicating how the experience of partnership helped university faculty to “think about education and its goals on a broader basis” (p.284). The outcomes anticipated within partner institutions, coupled with the political framing of school-based leadership responsibilities (Campbell & Levin, 2012), implies an unbalanced power relationship and divergent goals between schools and universities entering into partnerships.

The dynamic nature of school-university partnerships means that they can stimulate all involved in education to be aware of learning and of collaborative learning processes. Literature about best-practice in school-university partnerships does not consider in depth how institutional cultures and structures, or political expectations, may impact partnership learning and outcomes. Similarly, when considering boundary-crossing practices, there appears to be no discussion about how the deconstruction of roles and boundaries between participants (who represent institutions during partnership) may impact the nature and function of the partner institutions.

2.5.2 The university in partnership

Most initial teacher education programmes have an approach that includes a theory component and a practicum component. C. Furlong (2013) identifies in interviews with pre-service teachers that they espouse progressive views of teacher identity but “they appeared pulled back by the traditional” (p.79) teacher archetypes that are “rigid, didactic and very evidently in control” (p.79) when reflecting on school-based experiences. The dynamic relationship between theory and practice is a clear point of debate in teacher education literature, with much research over the last decade (Darling-Hammond, 2006a; Loughran, Korthagen, & Russell, 2008; Pinnegar & Erickson, 2008) advocating for programmes that build teacher reflective practices to critically connect learning in school-based and university-based contexts.

Current thinking favours the idea that teacher education programmes need to ensure the theories of teaching and learning are not isolated from elements of practice (Cameron & Baker, 2004; Darling-Hammond, 2006b). Zeichner and Conklin (2016) note clear evidence of shifts in university teacher education programmes toward:

a greater focus on connecting coursework to the complexities of schools ...
a greater emphasis on teaching teachers to enact rather than just learn
about research-based teaching practices ... and the development of new
ways to share responsibility for teacher education across institutional
boundaries. (p.25).

The professional knowledge gained, or generated, in teacher education programmes where there is an emphasis on the intersections of theory and practice has adopted a medical metaphor of ‘clinical education programmes’. Education has long adapted professional medical discourse – e.g., diagnostic testing, intervention, instructional rounds – to the preparation and education of teachers. Davies et al. (2015) argue that the medical metaphor of clinical practice has promise when translated into an educational context because it enables authentic connections between theory and practice to become evident, promotes the centrality of partnerships between schools and universities, and facilitates professional dialogue to increase effective teacher judgements.

While the approach of clinical education programmes – such as New Zealand’s Master of Teaching and Learning incentivised under Government initiatives (Ministry of Education, 2013,

2014a) – is not too far removed from the aims of Dewey’s Laboratory School, this paradigm for teacher preparation “ultimately shapes the practices of university staff working in the programmes” (Davies et al., 2015, p.514). This intersection of theory and practice ideally positively influences the pedagogical theories teacher-educators adopt, the choice of research paradigms, and the collective knowledge generated within the discipline of education.

In the university setting, teacher-educators are positioned to transmit a body of professional knowledge. Understanding teacher-educators, and teacher education programmes, as transmitting professional knowledge has implications for what teacher-educators can contribute to new knowledge generation within partnerships. Firstly, this positioning foreshadows a “collision between quality professionals and regulated technicians” (Bourke, Ryan & Lloyd, 2016, p.7) for teacher education programme outcomes. The transmission model assumes a ‘known’ and ‘knowable’ set of skills to make efficient professional judgements. Teacher education can then be understood as transmitting the flowchart for effective professional judgements, and a checklist of skills in which pre-service teachers gain competency. This has the capacity to position teacher-educators in “an anti-intellectual discourse where graduates as technicians are ... the robotic cogs in the government machine with ITE programs as the robot manufacturers” (Bourke et al., 2016, p.7).

‘Clinical practice’ models of teacher education may promote novel interactions at the intersection of theory and practice. Yet, the notion that theory exists as a fixed body of professional knowledge, as something that can be delivered as part of professional preparation programmes, undermines the capacity of universities to contribute to the knowledge generated within the discipline of education in that new interactional space. A university’s limited capacity to contribute to school-university partnership practice may also be exacerbated by a tension between policy and profession where, historically, the notion of delivering professional preparation has positioned teacher education programmes at the frontline of government policy developments aimed at improvement in the state education system (Bourke et al., 2016).

These tensions, coupled with a tendency toward valuing practical inquiry in education (Loughran, 2002; Ministry of Education, n.d.) could mean that ‘clinical practice’ models have the capacity to subvert alternative research aims, and to limit the diversity and scope of research approaches that could provide novel solutions to emergent educational problems (Greany et al.,

2014; Hammersley, 1993). The ability of educational research to specifically address elements of quality teacher practice is an aim within 'clinical practice' models (Bartholomew & Sandholtz, 2009; Davies et al., 2015; Handscomb et al., 2014). Yet, while research can produce lists of the characteristics of expert teachers and evidence-based expert teaching practices (Garmston, 1998; Findell, 2009; Hattie, 2009; Marzano, Frontier & Livingston, 2011), these remain open to being interpreted from a technocratic perspective. Hargreaves and Fullan (2012) warn that these type of research-based checklists, rather than the complex practices of teaching and learning, can become an accountability measure for teachers and teacher education.

A school-university partnership focus on practitioner research models can influence other educational research aims and adoption of other research paradigms during partnerships. Hammersley (1993) understands that the lenses through which a researcher considers a problem, and the methods a researcher uses to approach that problem, will differ from those adopted by a practitioner. But, the emergence of the identity of 'teacher as researcher' (Loughran, 2002) has the capacity to reposition meanings commonly associated with 'research' in education, possibly affecting how wider educational research is undertaken, financed, or managed.

The current conceptual framing of a university is that, as an institutional partner, it possesses deep knowledge of educational theories and that these theories are relevant to shaping practice. University participants bring this theoretical expertise to partnerships. Ostensibly, this theoretical knowledge is challenged and critiqued at the intersection of theory and practice to develop new ways of sharing responsibility for improved professional preparation, and ongoing teacher education across the system. A tension accompanying this framing is the positioning of university's initial teacher education programmes as "robot manufacturers" (Bourke et al., 2016, p.7), and questions of research authority (and autonomy) arising from a trend toward practical inquiry. Additionally, within a system that is shifting toward collaborative practice, this could assume that universities bring deep theoretical knowledge related to collaboration in education when they may not.

2.5.3 The school in partnership

The role of schools in partnership appears to be enacting research-based teaching practices and developing new ways of sharing responsibility for improved learning across the system. The literature implies that the negotiation of power, accountabilities, boundary-crossing, and collective identity are fostered by school-based leaders (Darling-Hammond & Rothman, 2011; Moss, 2008). The implications for partnership are that the intersection of theory and practice is primarily situated within schools, and led by schools toward broader socio-political aims. This centralises a school's institutional role in partnership and, by default, marginalises a university's institutional role in partnership. Essentially, schools are expected to 'be the change'.

The positioning of schools in partnership includes schools being imagined as the sites of "sustainable changes" (Ministry of Education, 2014b, p.7), and teachers being imagined as a learning collective who undertake both 'clinical practice' and 'research' to contribute improved professional knowledge. This may place demands on teachers within school-university partnerships by reframing identity concepts of 'teacher'.

Alton-Lee's (2003) best evidence synthesis on quality teaching highlights that teachers require an in-depth research-based knowledge. School-university partnerships can be an interactional space where new evidence-based knowledge is generated, with theoretical and research expertise drawn from university partners. Nevertheless, the identity of 'teacher as researcher' also emerges as important. Loughran (2002) presents the idea that "Teacher-researchers can be characterised as those practitioners who attempt to better understand their practice, and its impact on their students, by researching the relationship between teaching and learning in their world of work" (p.3). It is not clear in the literature exactly how the idea of 'teacher as researcher' differs from teachers having skills and orientations toward professional practical inquiry.

The combination of 'teacher as clinician' and 'teacher as researcher' identities could be associated with a technocratic trend where the focus on evidence-based practice is at risk of becoming robotic, and anti-intellectual (Bourke et al., 2016). When the Ministry of Education "view teachers as researchers" (Ministry of Education, n.d., p.1) rather than 'researchers as researchers' it has the capacity to create an echo-chamber because research underpins policy

development (Ministry of Education, 2013), and policy development underpins applied practice. Essentially, a focus on practitioner research influences the type of research which might be undertaken in the wider field of education. The Ministry of Education's research initiatives involving practitioners, such as the *Teacher-led innovation fund* and the *Teaching and learning research initiative*, highlight how practitioner research is currently incentivised.

The problem that arises is that diverse ideas, and new knowledge that might be generated through partnership practice where alternative research approaches are adopted, can only be viewed through a lens of status-quo understandings. This perpetuates the way the current education system operates rather than conceptualising how to 'future-proof' it. Equally, such homogeneous networks do not empower school-based participants to engage with new ways of thinking, negotiate possibilities, or build the capacity to adapt quickly to emerging circumstances.

Such empowerment may positively shape partnership outcomes. Beckett (2014) described a high-level of personal and professional commitment to a partnership. The resolve Beckett (2014) describes was driven by concern that teachers and academics alike "can only do so much to meet somewhat unrealistic policy expectations" (p.787). Nevertheless, the development of collaborative processes takes time and trust (Beckett, 2014; Moss, 2008; Schuck, 2012) – which can vary during the partnership due to broader institutional (Schuck, 2012; Tsui & Law, 2007), political (Beckett, 2014; Moss, 2008), and financial (Gardner, 2011; Walsh & Backe, 2013) forces – and teachers can be wary of committing the necessary time for collaboration (Segedin, 2011).

The political framing of school leaders is also evident in the literature. School leaders within a partnership are identified as being essential for the development of collective organisational capacity, and for spreading and sustaining changes in practice (Campbell & Levin, 2012; Moss, 2008; Fullan & Quinn, 2016). There is an expectation that while school-university partnerships have the potential to generate professional capital (Hargreaves & Fullan, 2012) in education, "collaboration in the future will be driven by school leaders" (Department for Education, 2010, p.52). Government bodies, such as Canada's Ministry of Education, have identified "school leadership to be a key supporting condition in the achievement of its education priorities" (Darling-Hammond & Rothman, 2011, p.28). While school-university partnerships may generate

collective knowledge and learning about education, the underlying expectation within the political framework is that “sustainable changes” (Ministry of Education, 2014b, p.7) will be evident at the chalk face rather than in an ivory tower.

This political framing of ‘effective leadership’ within partnerships relying on school-based practitioners (or regional and district school leaders across the globe) doesn’t place school-university partnerships at the intersection of theory and practice as readily as the literature suggests. Instead, it frames the learning arising from partnerships as progressing government educational priorities, rather than also progressing other interests that may have relevant contributions to make to the body of professional knowledge for an uncertain future. Despite notions of the independence and autonomy of professional expertise, many teacher professional bodies across the globe operate in a context where government policy development directs the aims and work of the profession (Bourke et al., 2016).

Democratic notions of knowledge networks negotiating their learning together are envisioned through a narrow political lens where effective leadership secures ‘buy in’ (Fullan, 2012; Moore Johnson & Donaldson, 2007), overcomes ‘resistance’ (Terhart, 2013; Zimmerman, 2006), and propels the “sustainable changes” (Ministry of Education, 2014b, p.7) leading toward a high-performing education system.

The underlying expectation is that schools (and schooling) will both discover and enact sustainable change. The current conceptual framing of a school includes an idea that its institutional culture and structures support collective practices for teachers to improve student learning. School participants are anticipated to bring applied expertise to a school-university partnership. Their applied knowledge is challenged and critiqued at the intersection of theory and practice to increase the capacity for learning across the system. As the system is shifting toward collaborative practice, this may also assume that schools bring deep applied knowledge of the impact of collaborative practice on student learning.

2.6 Connecting the dots

Historically agreed best-practices and common challenges are evident in school-university partnership discourse. There is agreement that partnerships are influenced by “ineffable

partnership qualities” (Gardner, 2011, p.82) related to: intrapersonal and interpersonal relationships; overlapping commitments and cultures; and other social factors that can influence engagement, sustainability, or success. Much of the existing research on partnerships in education is related to the structural, or personal, pragmatic realities of partnership. How to ‘do’ partnership has already been extensively researched.

To some extent, ways to ‘think’ partnership have also been addressed in the literature. The university as an institutional partner is anticipated to draw from a deep knowledge of educational theories, relevant to shaping practice. The conceptual framing of a school as an institutional partner, with a culture and structures that support collective practices, is anticipated to draw from applied expertise. I’ve highlighted tensions within this positioning of institutions.

Thinking about partnership has also been addressed when considering the particular roles that groups of participants are anticipated to fulfil within the education system. There is evidence those roles and purposes may be at odds with traditional university-school knowledge hierarchies, educational policy formulation, professional practices, and the role of academic scholarship, when viewed through a lens of collaborative networks.

To ‘think’ about partnership, there is also an assumption that the intersection of theory and practice is the space where new knowledge is generated. Further, that new knowledge is anticipated to ensure the education system is ‘future-proof’, and that the system is responsive to wider socioeconomic trends. Equally, there is an underlying expectation that sustaining processes for generating and developing the quality of interactions within the system, for nurturing the conditions for emergence, requires educators to engage as connected learners. It may also require institutional partners to position themselves as connected learners.

While school-university partnerships overlap in purpose with institutional aims, the way in which institutional structures, expectations, goals, responsibilities, and intentions, may impact partnership (in process or outcome) is not deeply addressed in the literature. Through various descriptions, there is an acknowledgement that institutions (governments, universities, and schools) do impact partnership processes and outcomes, but the capacity of an institution to frame how partnership is, and can be, imagined is not addressed. This leaves scope for

research into how partnership is conceived by institutions and the conceptual schema that shape how partnership might be practiced.

This scope for research is especially relevant in the context of educational futures literature, where understandings of partnership purposes interlace with new ways of comprehending agency, identity, and knowledge. While the Ministry of Education is advocating a systemic shift toward more collaborative practice, unresolved debate about functional roles and responsibilities continues to pervade discourse about school-university partnerships.

There are implicit assumptions underlying claims about how partnership can empower participants (Schuck, 2012; Segedin, 2011), renew institutions (Goodlad, 1988; Tsui & Law, 2007), grow a professional knowledge base (Beckett, 2014; Ministry of Education, 2013), or build professional capital (Hargreaves & Fullan, 2012). There are ways of conceptualising 'partnership' that are not explicitly discussed in the current literature. Yet, the systemic shift toward collaboration assumes that partnership is 'good'. This assumption may impact on the agency, knowledge, and identity of participants, as well as on the purposes of teacher education and the education system. It may impact how institutions represent themselves and interact.

My aim is to expose these implicit ways of understanding partnership. I want to focus on how ideas of 'partnership' are presented by the institutions involved because, if I can notice the ways of 'thinking' partnership framed by institutions, I will have a greater capacity to comprehend the practice of partnership. By exposing the conceptual frameworks that exist in the spaces in between, underlying current discourse of partnership in New Zealand education, this research could contribute to a re-framing of current partnership practice. This research can contribute to addressing wider issues that may impact upon the conditions for 'better' partnership, such as: the relationship between accountability and empowerment in partnership interactions; the core business of schools and universities in partnership; and how stakeholders can act intentionally in a complex adaptive system.

2.7 Research questions

My key research question is:

What are the implicit assumptions and conceptual frameworks expressed by institutions in discourse around school-university partnerships?

This key research question encompasses the following sub-questions:

- What stated and unstated **purpose/s** does partnership currently serve in New Zealand education (and what **problem/s** is partnership anticipated to re/solve)?
- How are concepts around partnership currently **presented** and **expressed** by institutions associated with New Zealand education?
- What stated and unstated **conditions** are necessary for partnership to fulfil its purpose/s in New Zealand education?

The ultimate aim of the research is to make explicit how institutions (the Ministry of Education, universities, and schools) currently ‘think’ partnership, and to identify conditions that may contribute to ‘thinking’ partnership ‘better’.

CHAPTER THREE: METHODOLOGY AND RESEARCH DESIGN

3.1 Overview

This research attempts to map the conceptual landscapes that underlie understandings of school-university partnership. Hidden assumptions may drive both thinking and behaviour in relation to partnership in education. School-university partnerships are a focus for this study, with an emphasis on partnership-model postgraduate programmes arising from the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative. The research broadly considers ideas related to 'partnership' currently presented by the Ministry of Education, universities, and schools. The ways these institutions have constructed meanings around 'partnership', and the conceptual lenses through which school-university partnerships can be viewed, are central to this research. This research occurs in a wider context where the education sector is experiencing a systemic shift toward collaborative models of professional practice (Ministry of Education, n.d.; 2013).

In this chapter, I present the research aims, provide justifications for selected research methodologies, and explain the research design.

3.2 Research aims

This section identifies the aims of the research, and the contributions the research may make to the field of education.

I want to understand the ways current ideas around 'partnership' are framed (Goffman, 1975; Lakoff, 2005). As outlined in Chapter 1, there is a lengthy history of school-university partnership in education. Despite an abundance of literature about how to create and maintain partnerships that 'work', there continues to be significant global investment in research on school-university partnerships (Darling-Hammond, 2006a; Davies et al., 2015; Greany et al., 2014). I wonder why, after a century of research, what we already know is not considered sufficient for understanding 'partnership' in education?

I am interested in what might be missing in the current discourse about partnership. The extant literature acknowledges that institutional cultures and practices can have an impact on partnership processes and outcomes (Benade et al., 2017; Day, 1998; Gardner, 2011; Schuck,

2012; Zhang et al., 2011). But, as I identified in Chapter 2, the current literature does not specifically address how institutions involved in school-university partnership practice present their understandings of 'partnership'. I am interested in how institutions present their understandings of 'partnership', and the implicit meanings that may shape 'partnership' as an entity.

This research aims to add to understanding about school-university partnerships by looking underneath the surface of partnership practices and processes. It aims to consider conceptual schema that shape how partnership can be imagined. Essentially, this research is concerned with how to 'think' partnership more than how to 'do' partnership.

An awareness of how to 'think' partnership could contribute to addressing issues such as: the relationship between accountability and empowerment in partnership interactions; the core business of schools and universities in partnership; and how stakeholders can act intentionally in a complex adaptive system.

3.3 Research paradigm

This section explains the research paradigm and the application of it to an educational context. It discusses how the paradigm influences the ways the research is shaped, especially regarding my approach to selecting research methodologies.

A complex system is characterised by its relational interdependencies. Complexity theory seeks to study systemic interactions. Originating in the sciences, complexity theory developed as a means for understanding social systems during the 1990s (Urry, 2005) and subsequently entered into educational discourse.

A fundamental position of complexity theory is that within open systems any causal relationships are multidimensional and dynamic. Complex adaptive systems behave in non-linear ways, and those dynamic interactions produce patterns, or phenomena, that cannot be reduced to constituent parts of the whole. The whole is irreducible to the elements within the system. Within complex systems, processes of "feedback, perturbation, autocatalysis, connectedness, and self-organisation" (Morrison, 2002, p.10) form and re-form differentiated,

diverse, diffuse sets of interactions and relationships. These relationships may stabilise or collapse in nonlinear and unpredictable ways. Characterised by dynamic heterogeneous elements within a system, complexity theory “makes no claim to predict what is essential and what can be marginalised in search for the levers” (Mason, 2016, p.44) of educational change.

The education system can be usefully conceptualised as a complex adaptive system. In New Zealand, it can be understood to be comprised of entities such as: individuals (pre-service teachers, provisionally certified teachers, practising teachers, school leaders, teacher-educators, students, educational researchers), classrooms, schools, school regions, school governance, universities, teacher education programs, the Education Council, teacher unions, teacher registration criteria, professional learning and development frameworks, coaching and mentoring frameworks, school-university partnerships, Communities of learning|Kāhui Ako, and government education policies (adapted from Cochran-Smith et al., 2014). It can also be conceptualised as a series of interactions which produce these entities within the systemic boundaries (e.g., the multiple causative mechanisms that prompt an individual to participate as ‘teacher’).

This paradigm shapes the dual methodological approaches adopted in this study, as well as the research design. Adopting the methods associated with a complexity paradigm – e.g., systems mapping – can prove insightful and identify patterns of interaction occurring within the system. But I am investigating underlying conceptual patterns and phenomena within the system. The science philosopher Wimsatt (1994) offers a taxonomy that is useful for thinking about complex systems at a conceptual level.

Wimsatt’s (1994) ontological taxonomy approaches complex systems as the emergence of “causal matter - an undifferentiated tissue of causal structures” (p.5) - into different structures within a system. Under some conditions, this causal matter can emerge as compositionally relative “levels of organization” (Wimsatt, 1994, p.5). Under other conditions, causal matter can emerge as “kinds of systematic slices [perspectives]” (Wimsatt, 1994, p.5). Under other conditions, where the interdependence between levels of organisation and perspectives is impossible to differentiate, this emerges as a “causal-thicket” (Wimsatt, 1994, p.5). Utilising Wimsatt’s (1994) ontology, the “three kinds of structures are rich in methodological and philosophical consequences for understanding the strengths and limitations of different

approaches to studying problems and phenomena in systems characterized by one of them” (p.5). Wimsatt’s (1994) ontological taxonomy offers a conceptual frame for considering emergent structures within complex systems.

Wimsatt (1994) argues that “social realms are mostly thickets” (p.23) and considers dense causal connectivities of these networks to “be the norm” (p.23) in the social arena. While a “causal-thicket” (Wimsatt, 1994, p.5) vantage point is one where the complexity of the system confounds problem-solving processes, adopting a vantage point studying “perspectives” (Wimsatt, 1994, p.18) “may still seem to have an organizing power (just as viewing a thicket or shrub from different sides will reveal a shape to its bushy confusion)” (Wimsatt, 1994, p.22). This study is considering conceptual frameworks so has particular focus on the interplay of perspectives.

Systems can be noticed from a variety of “perspectives” (Wimsatt, 1994, p.18), each possessing apparent cohesiveness. This vantage point acknowledges that relatively cohesive sets of relationships between heterogeneous elements can emerge in complex adaptive systems. The inherent incompleteness of any perspective means that systems “will differ in the degree to which they have problems which are trans-perspectival - which require the use of information from more than one perspective for their solution” (Wimsatt, 1994, p.19). Wimsatt (1994) argues that while simpler problems “are bounded and solvable with the resources of a single perspective” (p.19) more complex problems require larger or multiple perspectives to understand. Thus, perspectives can overlap and interact. Noticing complex systems from the vantage point of “perspectives” (Wimsatt, 1994, p.18) provides access to relatively cohesive views of interactions, “which can cross-cut one another in various ways, and at various angles, views which are individually recognized as incomplete, views which may be specialized for or better for representing or for solving different problems” (Wimsatt, 1994, p.20). This research seeks to explain how institutional “perspectives” (Wimsatt, 1994, p.18) are bounded, and how they overlap.

This research will investigate the conceptual frameworks that are used to create and discuss partnership in a current New Zealand educational context. The outcome of this research is intended to be an explanation of conceptual frames influencing school-university partnership. This outcome acknowledges that the schema used for understanding how things ‘are’

influences the ways we might 'know'. Making explicit how institutional stakeholders currently 'think' partnership requires adopting methodology useful for both the study of "perspectives" (Wimsatt, 1994, p.18) and for deeper ontological analysis.

3.4 Methodologies

The next sections examine the two research approaches chosen to complement the research aims. The selected methodologies have strengths and weaknesses as a research platform in the arena of school-university partnership. The next sections explain the selected methodologies and provide justification for how each supports the research aim.

3.4.1 Critical Realism

I have adopted a critical realist research methodology. Using critical realism, I can align my research approach with the paradigm of complexity theory and allow space for ontological discussion.

Bhaskar (1975/1997) stratifies reality into three domains: the real; the actual; and the empirical. A critical realist's perspective is ontologically realist. Nevertheless, a critical realist adopts an interpretive position that knowledge is socially constructed and fallible. The critical realist seeks to understand and explain abstract generative mechanisms underlying what happens. Critical realists understand an "analysis of underlying mechanisms and structures [in the domain of the real] behind phenomena [in the domain of the empirical] is what it takes to create theories" (Alvesson & Sköldbberg, 2009, p.39) that are useful to progress understanding. Acknowledging the diversity and complexity of human society, aware that knowledge is fallible, critical realists still hold that there can be progress and development in human understanding (Sayer, 2000). The key outcome of critical realist research "is to modify, support, or reject existing theories to provide the most accurate explanation of reality" (Fletcher, 2017, p.185).

Complexity theorists hold a "notion of society as not static, but rather as a ... functionally differentiated system with emergent properties, consisting of internal subsystems" (Törnberg, 2011, p.3) and this aligns with the critical realist's approach to dynamic social processes, as Sayer (2000) notes:

the world is characterized by emergence, that is situations in which the conjunction of two or more features or aspects gives rise to new phenomena, which have properties which are irreducible to those of their constituents, even though the latter are necessary for their existence. (p.12).

In Bhaskar's critical realism "the fundamental subject matter of social science is not either individuals or collectives but relations" (Magill, 1994, p.117). This provides a framework for understanding what is possible in a nonlinear system, in which multiple domains of reality dynamically interact. Elder-Vass's (2007) view that "causal powers exist as emergent properties of the entities that possess them" (p.170) indicates potential interactions between Bhaskar's (1975/1997) domains of reality. Systemic potential is inherent in entities or structures, enabling or constraining them from behaving in certain ways in relationship to other entities or structures (Psillos, 2007). This view of systemic potential aligns with the adaptive dynamics of complexity theory.

Sayer (2000) argues that social systems are "necessarily open" (p.5), and that they evolve rather than equilibrate, "not least because people have the capacity to learn and change their behaviour" (p.5). Critical realists assert that people are capable of altering both the social structures they are part of and the human actions that produce these structures. Budd, Hill and Shannon (2008) consider critical realism in terms of information seeking and note that critical realism "allows for the explanation of human actions that are cognitively, intellectually, and pragmatically complex" (p.10). Similarly, considering initial teacher education Cochran-Smith et al. (2014) assert that synthesising critical realism and complexity theory provides a means to "relate macro and micro issues without being reductionist" (p.111), and a means to account for an agency-structure relationship that acknowledges "human beings may have the capacity to initiate certain causal sequences" (p.111).

Nevertheless, the aim of critical realist research is to explain the influences of the generative mechanisms in the domain of the real. At its heart, critical realist research seeks better abstract conceptualisations of what is necessary and what is contingent. This methodological approach is complementary to the research aim to make explicit how institutions (the Ministry of Education, universities, and schools) currently 'think' partnership, and to identify causal conditions contributing to 'thinking' partnership 'better'.

At face value, the abstraction of what is necessary and what is contingent appears in direct opposition to Mason's (2016) assertion that complexity theory "makes no claim to predict what is essential and what can be marginalised in search for the levers" (p.44) of educational change. It seems that utilising a complexity theory paradigm and a critical realist research platform is inherently flawed. The critical realist's "search for causation" (Fletcher, 2017, p.181) implies a simplistic cause-effect logic in a complex system where "causal-thickets" (Wimsatt, 1994, p.5) are the norm.

But this apparent opposition of paradigms does not exist in an ontological sense. Ontologically, Bhaskar's (1975/1997) generative mechanisms in the domain of the real are inaccessible. The generative mechanisms are causal relationships which exist and influence experience, but cannot be understood in terms of experience. Any explanation of these mechanisms will be flawed. Thinking about them, and refining our understanding of them through developing theoretical perspectives to better understand multi-causal interactions is a worthwhile pursuit. The ontology of critical realism is a useful guide for examining complex adaptive systems because the underlying position is that there are systemic mechanisms that can be understood better when abstracted from the individuals or collectives being studied but, concurrently, that the individuals and collectives experience these systemic mechanisms in localised contexts.

Sayer (2000) argues "thinking about what might or should be can also illuminate what is, by forcing us to ask searching questions about the conditions of existence" (p.157). The capacity of a critical realist theorising process to allow for complexity, and to engage with questions of social organisation, makes it useful for studying societies experiencing greater interdependence. Therefore, it is an appropriate foundation for studying an education system currently shifting toward more collaborative models of practice.

Epistemologically, critical realism places greater emphasis on logical abstraction as a means of generating understanding. Being reflective about the possibilities – seeking to understand what is necessary and what is contingent – is important. Yet, a critical realist methodology embraces the relevance of lived experience, embodied experience, or narrative as ways of knowing. Indeed, the "social element of the social sciences" (Budd, Hill & Shannon, 2008, p.10) is emphasised. A critical realist approach allows for nuance and sensitivity (Shipway, 2004). The epistemological frame of critical realism is inclusive, often employing a mix of quantitative and

qualitative data sets, where triangulation is endorsed because it affords a more comprehensive basis from which a complex reality can be theorised (Sobh & Perry, 2006).

This largely inclusive epistemology is problematic in terms of the limited scope of this research, which is to make explicit how institutional stakeholders currently conceptualise and express ideas of partnership. I did intend to investigate the experiences of people engaged in the school-university partnerships that had been recently established under the Government's *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative but, as I explain later in the research design, ultimately decided against it. Thus, it can be argued that there is a methodological flaw in this research. I prefer to acknowledge it as a limitation and an identified opportunity for further research that is consistent with the methodological approach of critical realism.

The distinction between epistemology and ontology is important for critical realists to maintain. An ontologically realist position, combined with an epistemologically relativist stance, means the outcome of research is to convey an understanding of what might be a better explanation. The critical realist researcher employs methods that include processes engaging feedback systems between the research question, the data, the researcher, and the abstract theories used to provide explanation. The methods of critical realism are not fundamentally linear, but do involve: identifying existing theoretical explanations and tentative trends (demi-regularities) that exist in empirical data; a process of abduction, or creatively re-describing the theories that may account for the tentative trends in the empirical data; and retroduction, which consciously demands a 'better', more comprehensive explanation (Fletcher, 2017; Sayer, 2000; Sobh & Perry, 2006). This study utilises a critical realist theorising methodology.

Ultimately, a critical realist approach "treats the world as theory-laden, but not theory-determined" (Fletcher, 2017, p.182). Within a critical realist perspective there is something indisputable. There is an explanation worth striving toward. There is an answer. Seeking that answer is valuable. The view that reality is *a priori* to any individual or collective experience, yet includes and does not reduce those multiple experiences, meanings, and values (even though these can be contrary or contradictory) expands possibilities for understanding in a complex manner. It means that through research a better conceptual theory can be extrapolated. Even

though this theory will be necessarily flawed, it can aid in the transformation of an understanding of what 'is'.

3.4.2 Critical Discourse Analysis

I have also adopted a critical discourse analysis methodology. Using a discourse analysis approach, I can align my research methodology with the paradigm of complexity theory, allow space for ontological discussion, and delve into how existing frames for thinking might shape action.

Adopting a complexity theory paradigm assumes interconnectedness, non-linear relational dimensions between macro and micro elements of a system. Adopting a critical discourse analysis methodology assumes interconnectedness; a discursive relationship between the ways power and knowledge are structured, and social action. Stemming from a critical theory perspective, critical discourse analysis encompasses an overarching emancipatory aim. A critical discourse analysis will expose social structures and actions which implicitly contribute to social reproduction, in order to make the discursive relationships visible and open to challenge, critique, and action.

Norman Fairclough (1985; 1989) developed a methodological framework for critical discourse analysis. There are multiple forms and foci of critical discourse analysis that have emerged since the 1980s (Breeze, 2011). Fairclough (2014) notes his own "critical analysis shifts from variant to variant, but not in a way that discards the earlier concerns, but rather in a cumulative way that incorporates them into new theoretical and methodological syntheses" (p.1). Two key forms of critique feature in these shifts; one is normative, the other explanatory.

Fairclough (2001) identifies Bhaskar's (1986) concept of 'explanatory critique' as a basis of a framework for discourse analysis. Critical discourse analysis aligns with critical realism in a focus on critique and analysis. The intersection of these two theoretical lenses is evident in the relational, discursive component. The "chains of cause and effect" (Fairclough, 1985, p.747) are not necessarily static because, in a domain of social action, interactions reproduce structures and have potential to transform them. This relates to the emancipatory aim of critical theory, where critical discourse analysis has its roots.

With an oscillating focus on structures and actions, explanatory critical discourse analysis (Fairclough, 2001) is a research approach that incorporates the complexity of interactions and the patterns which emerge. Texts can be critically analysed to expose the hidden assumptions that are not immediately visible. Critique is essential to make the interconnectedness of things visible because “in human matters, interconnections ... may be distorted out of vision” (Fairclough, 1985, p.747). Using explanatory critical discourse analysis methodologies supports critical realist approaches because it focuses on the conceptual frameworks that drive, and change, both thinking and behaviour. In explanatory critique, the approach uses “a critique of discourse as a point of entry for a critique of the existing social order” (Fairclough, 2014) that may lead to action and changes in behaviour. This methodological approach is complementary to the research aim to make explicit how institutions (the Ministry of Education, universities, and schools) currently ‘think’ partnership, and to identify conditions contributing to ‘thinking’ partnership ‘better’.

Critical discourse analysis has a central concern of power relationships in society. Fairclough (2001) notes that the particular focus of critical discourse analysis is the shifting social structuring relationships. A focus on power relationships in the discourse of school-university partnerships, especially in a context where the system is currently shifting toward models of collaborative practice, provides a useful lens for investigation. As noted in Chapter 2, dynamic power relationships are a theme in the school-university partnership literature. Nevertheless, critical theory is not central to this study, and this research is more akin to critical realism in orientation, where I acknowledge “the possibility that an explanatory critique of the ways in which structures of power operate in society can be emancipatory” (Kilduff, Mehra & Dunn, 2011, p.308) but the overarching aim is not emancipation.

An explanatory critical discourse analysis methodology – aligned with both a complexity theory paradigm and a critical realist theorising methodology – provides a means of analysing current discourse about partnership in education as a practical “argument for action” (Fairclough & Fairclough, 2012, p.30). In this study, Fairclough and Fairclough’s (2012) model for political discourse analysis is employed as a method. But it is important to recognise that critical discourse analysis is a methodological approach, used in this research with an aim to critique what is happening now in the arena of school-university partnerships in New Zealand. It is

utilised to uncover the conditions that may influence how the entity of 'partnership' interacts. This methodological approach has scope for considering ontological elements of how institutional stakeholders currently 'think' partnership in their text-based discourse as part of the existing social order.

3.5 Research design

This section outlines and explains decisions made in designing the research, noting considerations related to reliability and validity. It explains the methods chosen, the process for the selection of methods, and the application of the selected methods in collecting and analysing data. Finally, this section considers the limitations of the research.

The Ministry of Education has oversight of education policies and services, for both the school and tertiary sector in New Zealand. Currently, the Ministry of Education is attempting to support a systemic shift toward collaborative models of practice. Therefore, the research design needed to include an investigation into how the Ministry of Education is constructing and expressing ideas of 'partnership'. The schema used to frame 'partnership' may influence which supports are prioritised – especially if alternate schema for understanding 'partnership' are held by institutions applying for, or receiving, Ministry of Education support. The role of the Ministry of Education in strategic policy development for the education sector is significant in New Zealand. The ways the Ministry of Education approaches 'partnership' can impact the sector's ability to consider, or possess, alternate schema for understanding. Consequently, I decided to begin with a focus on Ministry of Education texts that engaged with ideas of 'partnership'.

The strategic direction expressed by the Ministry of Education was relevant to this study. The *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative grew from previous initiatives. While a raft of publicly available documents can be utilised to generate a coherent provenance of the concepts underpinning policy direction, I was aiming to identify current understandings that exist in the present system. Understanding what is happening in the present system is essential when operating under a complexity theory paradigm (Garvey Berger & Johnston, 2015) because the system is in constant flux. Equally, I wanted to include an analysis of the current presentation of these ideas to the schools or tertiary

institutions considering enacting partnerships because this provides an insight into the concepts that may be influencing systemic interactions. I chose Ministry of Education webpages as the foundational texts for analysis (which include hyperlinks to background cabinet papers, research, and minutes) primarily due to their currency. Secondly, I chose pages from the Ministry of Education website because these presented a published public stance, which can highlight the conceptual frames settled upon by the Ministry of Education.

The Ministry of Education's published public stance on partnership, and the implicit assumptions this entails, provides one "perspective" (Wimsatt, 1994, p.19) within the discourse around partnership in New Zealand. To ensure this study could reach more reliable conclusions I sought to draw from more than one perspective. I considered accessing memoranda of understanding, programme documents, and interviews with people engaged in the school-university partnerships that had been established under the Government's *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative. The intent of triangulating the Ministry of Education data gathered with diverse documentary data, as well as qualitative interviews, was to increase the reliability of the research conclusions and align with critical realist methodologies. I hold that this intent is worthwhile. Nevertheless, the design of this study was influenced in part by the inaccessibility of some documents for analysis.

The memoranda of understanding between schools and universities proved too difficult to access, so I decided not to use them. Certain programme documents (e.g., paper outlines) were easily accessible via university websites. The availability of documents published online meant I elected to focus on the published public stance of institutions enacting instances of school-university partnerships.

The reasoning behind this decision was that I could compare how the Ministry of Education, universities, and schools, expressed their conceptual frameworks about 'partnership' strategically, and specifically in relation to the *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative. This meant that I would still have two comparative contexts (i.e., schools and universities) to identify similarities or differences in the schema for understanding 'partnership'. These comparative contexts provide a means to better understand the expression of 'partnership' by institutions overseen by the Ministry of Education. Additionally, these comparative contexts contribute to the reliability of the research.

Utilising digitally published texts from schools and universities has the additional benefit of supporting the validity of the study, as the data would be current and share common purposes. For the universities, this common purpose is informing and persuading potential students to enrol in their postgraduate level initial teacher education programmes. For the schools, this common purpose is informing the school community. This could serve to highlight not just how the discourse of partnership is expressed, but how it is prioritised across sectors and institutions engaging in partnerships. This decision aligns with both research methodologies that seek to identify and explain how relationships are established and perpetuated.

Choosing not to seek the perspectives of people involved with school-university partnerships stemmed from this shift in focus toward a published public stance. This does not mean that I would argue all partnership participants adhere to an employing institution's public stance in their frameworks for understanding partnership, nor that experiences of 'partnership' are not relevant to a study of the implicit assumptions in the discourse of school-university partnerships. The literature (refer Chapter 2) clearly indicates that the complex dynamics of employee commitments, institutional cultures, and priorities, can shape understandings of what the purposes, processes, and outcomes of partnership can be. The shift toward researching the schema that underpin institutional published public stances provides an opportunity to analyse schema in a situation where the information has been considered and is purposefully chosen to represent the institution (to some extent) as a partner organisation. This positions the institution itself as a partnership participant. How institutions express their understandings of 'partnership' is a current gap in the literature. This links to the deeper concerns noted in Chapter 2 about networked learning, and networked knowledge.

Exposing the implicit meaning-making systems that contribute to the published public stance on 'partnership' expressed by the Ministry of Education required a model for analysis that could enable a dual focus: on both the key concepts related to 'partnership' and the published public stance settled upon by the Ministry of Education. I planned to employ an explanatory critique, and I chose Fairclough and Fairclough's (2012) political discourse analysis model to reach a deeper understanding of the Ministry of Education's "argument for action" (p.30). This frames the published public stance of the Ministry of Education as a set of claims and premises that can each be examined for their strength in a larger argument about what the education sector

might do, especially regarding partnership and collaboration. The political discourse analysis model gave me a means to analyse the Ministry of Education's published public stance, and capacity to anchor my critique in terms of systemic direction, investigating what possibilities for understanding may be closed by the way the argument is presented.

3.5.1 Selected methods

The next section explains the methods selected for this study. It provides an overview of each method. Section 3.5.2 explains in more detail why these methods were selected and how each were applied.

3.5.1.1 Critical realist theorising

Critical realist theorising involves investigating a range of data and consciously examining it in different ways in order to develop a more comprehensive explanation. This involves two key processes to identify (ultimately inaccessible and unknowable) causative mechanisms.

1. Abductive reasoning. This process is used to identify patterns or demi-regularities in the data. Abduction is a process of forming associations among the possibilities in the data. It is a way for the researcher to identify interconnections between the entities – physical objects and concepts – their inherent attributes, the contingencies these attributes are influenced by, and the generative mechanisms influencing what is noticeable or possible. Abduction is a creative process, an inference toward a 'best explanation'.

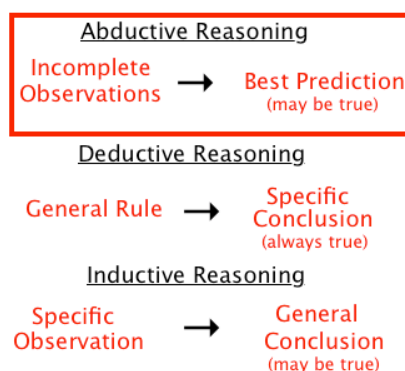


Figure 1. The main differences between abductive, deductive and inductive reasoning (Dudovskiy, 2016, para.2).

From *Research Methodology*, by John Dudovskiy, 2016 (<http://research-methodology.net/research-methodology/research-approach/abductive-reasoning-abductive-approach/>).

Curedale (2013) considers abductive process to be a question of “What is possible to be true?” (p.17). The abductive process reviews information and re-frames problems. Abductive reasoning begins with the assumption that the data is *necessarily* incomplete and *predicts* what is possible. The abductive process is characterised by questions of possibility. Abductive reasoning takes into account information that does not fit easily into patterns or trends, the unique features. Some questions used for the abductive process include those that seek to notice arbitrary and coincidental, surprising, aspects of the data:

- *What ideas/information ‘sticks out’, is surprising, or unexpected?*
- *What is unique about an idea/information?*
- *What direct and indirect relationships can be inferred between different ideas?*
- *What other patterns can be noticed?*
- *What alternative explanations could there be?*

The abductive process interrogates possible causative mechanisms underlying noticed entities and the interactions of those entities (Sayer, 2000)

- *What does the existence of this idea/information presuppose?*
- *What conditions must the entity have to exist?*
- *What are the pre-conditions for this practice?*
- *What is it about the entity (inherent attributes or properties) that enables/permits this entity to interact in certain ways?*
- *What contingencies (external influences) might exist to enable/permit this entity to interact in certain ways?*

2. Retroductive hypothesising. Retroduction is proposing an explanation to account for the observed data. The inferencing of the abductive reasoning process opens up a range of possibilities, while retroductive theorising tests the possible explanations by *comparing* possible explanations against the data and seeking the most satisfying explanation. The retroductive process logically follows the data available to compare hypotheses. It moves from the conceptual level of considering entities and their attributes, to another conceptual level of theorising the mechanisms (generative powers) that have causal influence. It is important that abductive inferences are tested against available data, and that retroductive hypotheses seek to provide an inclusive explanation as “certain features that might have been considered arbitrary or coincidental become necessary by virtue of the hypothesis” (Schvaneveldt & Cohen, 2010, p.194). The hypothesising aims to reach a more comprehensive causative explanation. The proposed retroductive hypothesis

reviews and revises possible explanations, offering the most satisfying account of the data. The types of questions used to produce a retroductive hypothesis include:

- *How well does this hypothesis account for all of the available data?*
- *Where are the 'weak links' in this theory?*
- *What similar/different explanations can be used to explain the data?*

This method includes recursive processes, engaging feedback systems between the research question, the data, the researcher, and the theories used to provide explanation (Fletcher, 2017; Sayer, 2000; Sobh & Perry, 2006). Critical realist theorising can expose unnoticed relationships between elements in a system, including implicit frameworks underpinning the ways ideas are presented and communicated. This method can help develop an explanation of the conditions necessary for partnership to exist and fulfil its purpose in the New Zealand education system.

3.5.1.2 Explanatory critique

Explanatory critique is a method aligned with both critical realism and critical discourse analysis. The method can be utilised to critique and explain social structures. In this case, how institutions 'think' partnership, the associated concepts, and the underlying schema used to structure how 'partnership' is presented.

The research questions seek to identify stated purposes for partnerships, and to uncover implicit assumptions and conceptual schema framing how ideas related to 'partnership' are currently presented. It is worthwhile to summarise the thematic analysis approach to the data before noting the questions that will be used to develop a critique.

The thematic analysis, consistent with critical realist methodologies, employs recursive feedback systems to code the data and assists in identifying demi-regularities. This approach means that content coding is undertaken and reviewed with different questions in mind to explore the possibilities that exist in the data. The thematic interrogation of the data relates to questions of:

- a) *What is explicitly stated about 'partnership'?*
- b) *What is implicitly stated about 'partnership'?*

Note. For questions a) and b) above this will use terminology noticed during familiarisation with the data – i.e., not just the terms 'partner' or 'partnership' – as a starting point.

- c) *What is the data about?*
- d) *What ideas co-exist alongside 'partnership' ideas (and may indicate something about how 'partnership' is expressed or imagined)?*

Note. For questions c) and d) above this will use content ideas noticed during familiarisation with the data – i.e., looking beyond the 'partnership' terminology – and will include frequency analysis of groups of nouns or verbs. It will be repeated with different content ideas to identify tentative trends or demi-regularities.

- e) *How is what is explicitly stated about 'partnership' (and partnerships ideas) similar/different to what is implicitly stated about 'partnership' (and partnership ideas)?*

Note. For question e) above this will use linguistic – e.g., tone, modality – and frequency analysis – e.g., of specific verbs – to examine the ways ideas are communicated.

The thematic analysis questions enable a broad scope of ideas to emerge from the content coding process. These questions allow for repetition and review to notice possibilities. The coding and theme development process can begin to highlight connections or relationships between concepts and assumptions. This contributes to the critical realist theorising method (refer Section 3.5.1.1) and can be a basis to develop understandings about the schema underpinning how concepts around partnership currently *presented* and *expressed* by institutions associated with New Zealand education.

The explanatory critique will approach the emergent themes as *concepts in the system*. It aims to analyse each conceptual theme to draw conclusions about:

- *What theoretical (or historical) background is relevant to understanding how this concept is currently presented in each context – i.e., by the Ministry of Education, schools, and universities – or, what is the 'lineage' of the idea?*
- *How the concept is expressed and presented (i.e. what 'meanings' does it generate) in each context*
- *Whether the concept is specifically linked to a single 'perspective' or is 'trans-perspectival' (Wimsatt, 1994)*
- *What the expression and presentation of the concept in each context might indicate about relationships between elements of the system (i.e., what assumptions might be revealed about how 'partnership' is currently understood across the system)*
- *What underlying purposes and problems associated with 'partnership' in the system can be derived from understanding this concept (and how this might provide explanations for how 'partnership' is currently understood).*

Explanatory critique of the concepts in the system can interrogate the discourse related to school-university partnerships to provide insight into relationships between institutional

elements of the system, aid explanation of frameworks sustaining social realities related to school-university partnership, and help to explain how partnership might be currently understood.

3.5.1.3 Political discourse analysis

Fairclough and Fairclough's (2012) political discourse analysis model integrates an analysis of argument with critical discourse analysis. The model provides a framework for critiquing the reasonableness and structure of an overall political argument, as well as allowing for discussion of how claims and premises are articulated. The model assumes that political discourse is essentially an "argument for action" (Fairclough & Fairclough, 2012, p.30) and is intended to provide reasons for acting or behaving in a certain manner. Fairclough and Fairclough (2012) distinguish this framework for analysis from other approaches (e.g., the discourse-historical approach of Wodak), arguing that:

argumentation cannot be viewed as a 'discursive' strategy in itself (as in DHA); nor can we speak about 'discursive strategies' in general. This is because, as we have said, strategies involve goals *outside* discourse, i.e. changes in the world. Moreover, it would not be possible to speak of 'discursive strategies' *as well as* political and economic strategies, or of 'discursive imaginaries' *as well as* political and economic imaginaries. In our view, changing the world so that it matches a certain political vision (imaginary) is the goal of action (i.e. a future state of affairs *in the world*, which can be described by means of language) and it is partly pursued argumentatively (discursively), by attempting to give agents (or oneself, as agent) reasons for acting in a way that will bring about that change in the real world. (p.24).

This model for analysing political discourse rests on the assumption that the primary activity of political discourse is one of argumentation for action in the world. Obviously, this does not presuppose that all political discourse takes the form of argument, but it frames the purpose of political discourse as a prompt for deliberation that precedes action. Argumentation for or against particular ways of acting in uncertain contexts, can ground decision making and secure commitments even though there may be other ways of acting. In this manner, this framework provides a means of analysing how "our beliefs feed into what we do" (Fairclough & Fairclough, 2012, p.87) and understands that representations enter an argument as premises that can be critically evaluated. "It is based on a view of politics in which the concepts of deliberation and decision making in contexts of uncertainty, risk and persistent disagreement are central"

(Fairclough & Fairclough, 2012, p17). Figure 2 outlines the structure used to analyse a political argument for action.

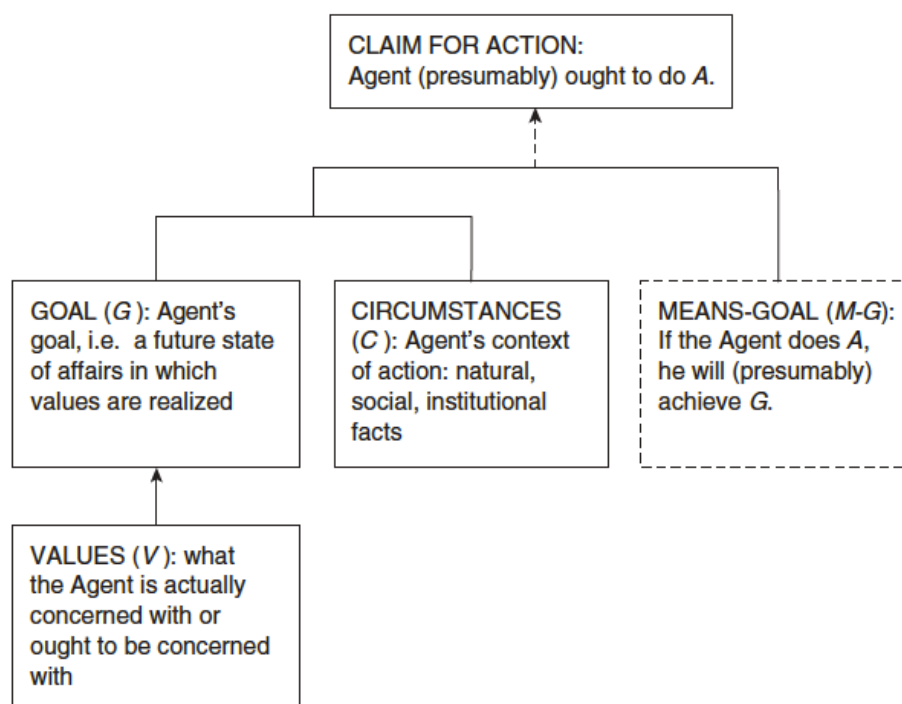


Figure 2. Proposed structure of a political argument for action (Fairclough & Fairclough, 2012, p.45).

From *Political discourse analysis: A method for advanced students* (p.45), by I. Fairclough and N. Fairclough, 2012, London, England: Routledge. Copyright (2012) by Isabela Fairclough and Norman Fairclough. Reprinted with permission.

To apply Fairclough & Fairclough's (2012) model, the stages for analysis are:

1. Identify the type of argument employed.
 - Deductive arguments support a claim with premises that *guarantee* a conclusion. If the premises are true the conclusion is *necessarily* true.
 - Inductive arguments support a claim with premises that suggest a *probable* conclusion. If the premises are true the conclusion is *likely* to be true.
 - Conducive arguments support a claim with multiple independent premises, each *strengthening* a conclusion. If the premises are true the conclusion is *presumed* to be true.
2. Identify the type of deliberative process intended by the reasoning.
 - Theoretical reasoning involves processes of prediction and exploration of possible consequences of action (including the claim for action and alternative claims). The audience deliberation is grounded in what *could* happen based on current circumstances or decisions. The aim of theoretical reasoning is to

provide sufficient predictive reasons for choosing one course of action over another.

- Practical reasoning is a step removed from theoretical reasoning, a practical reasoning “text is a ‘report’ of a process of collective” (Fairclough & Fairclough, 2012, p.122) deliberation. A decision and collective commitment to act is being communicated, rather than predictions and possibilities being openly debated. The audience deliberation is grounded on whether the action being communicated should happen. The aim of practical reasoning is to resolve reasonable disagreement with the chosen course of action. This is not seeking consensus. Rather, the argument seeks to provide agents who may disagree with *reasons* to ‘live with’ the difference of opinion and limit active opposition to the chosen course of action.
3. Evaluate whether the argument is rationally acceptable. This includes the overarching question: *‘Given all that is known and valued, is the proposed course of action a reasonable course of action?’* Fairclough and Fairclough (2012) advocate an extended pragma-dialectical model, which includes an evaluation of the premises supporting the claim for action (for both their truth and reasonableness).
- Value premises relate to normative socio-political concerns (i.e., what ethical/moral common beliefs a nation state, political party, or group founds its doctrines upon and hopes will become more fully realised in the world). These premises form the basis from which a political argument progresses and underpin an agent’s ‘desire’ to act.
 - Goal premises relate to political aspiration, the ‘imaginary’ future state of affairs where the value premises have become fully realised – e.g., the future utopian vision presented as possible ‘one day’ in Martin Luther King Jr.’s (1963) *I have a dream* speech. The ‘imaginary’ is a representation of the future capable of guiding actions. The evaluation of these premises stems from the question: *‘Does this representation of the future closely align with the value premises?’*
 - Circumstantial premises relate to the context for action (the natural, social or institutional facts). These premises form a representation of the actual world, and establish the concern/problem “in the real world” (Fairclough & Fairclough, 2012, p.24) that the claim for action is intended to resolve/solve. The evaluation of these premises hinges on the question: *‘Is the current situation presented in a way that is rationally acceptable?’*
 - Claims for action relate to the action/s an agent *could* or *should* take to overcome the concern/problem “in the real world” (Fairclough & Fairclough, 2012, p.24) presented in the circumstantial premises. The claims for action are the possible ‘solutions’ to the ‘problems’ represented. These claims are supported by the values, goals, and circumstances described in the argument.

The overall evaluation of these claims stems from the question '*Is this course of action more/less likely to positively/negatively impact the future 'imaginary'?*'. In a theoretical reasoning deliberation, this evaluation is underpinned by the questions: '*Is the solution presented offering sufficient reasons to choose this way forward?*', '*Could there be a better course of action?*' The evaluation of these claims in a practical reasoning deliberation is underpinned by the questions: '*Is the solution presented offering sufficient resolution of reasonable disagreement?*', '*Should this action be undertaken?*'

- Means-goal premises relate to the process of moving from the circumstances described to the actions claimed. The means-goal premise is the description of the process of how agents move from the problem to the actions claimed; performance of those actions then results in the achievement of the goals. The means-goal premises use if-then logic structures. The evaluative question of the means-goal premises in a deductive argument is: '*Is this the only process to undertake the actions claimed?*' The evaluative question of the means-goal premises in an inductive argument is: '*Is this the best (most preferable) process to undertake the actions claimed?*' The evaluative question of the means-goal premises in a conductive argument is: '*If we undertake this process, can we expect to undertake the actions claimed (and achieve our goals)?*'

4. Critically analyse how the argument is presented in the text/s (as a way of representing reality). This is accomplished by:

- Asking critical questions considering: representations of the world as persuasive definitions (i.e., as metaphors/frames that determine how the world is/can be imagined); perspective manipulation (i.e., criteria of truth and normative appropriateness); ideological explanation (i.e., social origins of beliefs/concerns); and political legitimization (i.e., sources of an agent's power).
- Analysis of the linguistic features, such as logic structures, modality, tone, content, and ideas.

Fairclough and Fairclough (2012) suppose that a "reasonable decision" results from following a reasonable procedure, it "may not be the 'best' or 'most rational' but it will have been arrived at ... by following a dialectical procedure of systematic, critical testing" (p.63). Understanding political discourse as a type of argument that prompts deliberation and precedes action can contribute a focus on discourse that highlights elements inspiring the action of 'partnership' and the ideas that frame understandings.

3.5.2 Data collection and analysis

The methods selected for this research have been chosen for their explanatory capacity, thus aligning them with the overarching paradigm, methodologies, and the research aims. The reasoning for selecting each method, as well as the application of these in the collection and analysis of research data, are explained in the next sections.

3.5.2.1 Stage one

The research design, with its focus on the current published public stance on ‘partnership’ expressed by institutional stakeholders in digitally published texts, demanded that data be collected from Ministry of Education, universities, and schools.

The website, www.education.govt.nz, was a starting point for data collection. The website was searched for the term “partnership”. Additionally, ten terms related to ‘partnership’ or collaborative practice, were also searched. Table 1 indicates the results of this search.

Table 1. *Ministry of Education: Total number of search results for terms related to ‘partnership’*

Terms	Number of results
‘cooperate’ and ‘cooperative’	41
‘partner’ and ‘partnership’	81
‘collaborate’, ‘collaborative’ and ‘collaboration’	138
‘share’ and ‘sharing’	235
‘together’	278
‘community’	616

Note. Search terms are listed in order of number of results, i.e., not alphabetically.

Each returned result was examined. Webpages were excluded on grounds of currency and relevance. If a webpage had last been *reviewed* prior to 2015, it was not considered for data collection. Further webpages were excluded on relevance grounds if the page was primarily about: early childhood education; school governance (e.g., health and safety); international education; Ministry of Education careers; news (e.g., events or awards, under the filepath “home/news”); operations (e.g., decile funding, performance-based research funding); property (e.g., the installation of sports equipment, school builds); working conditions (e.g., leave entitlements). It is acknowledged that some of the webpages excluded from data collection on relevance grounds could still make a valuable contribution towards understanding the conceptual frameworks currently influencing partnership in New Zealand education. In fact, this

highlights an opportunity for further research, which is inclusive of the early childhood education sector, as well as community driven partnerships.

Table 2 indicates the remaining number of search results after data exclusion. Search results that were specific subpages of a brief master page that hyperlinked to them were recorded as subpages, rather than as a separate page. After exclusion for currency and relevance, the remaining 158 master webpages, and 12 subpages, were coded to overview content.

Table 2. *Ministry of Education: Remaining number of search results after data exclusion*

Terms	Number of remaining results	Sub-page results
'cooperate' and 'cooperative'	4	0
'partner' and 'partnership'	4	0
'collaborate', 'collaborative' and 'collaboration'	34	3
'share' and 'sharing'	20	1
'together'	27	0
'community'	69	8

Note. Duplications were omitted from Table 2. i.e., any page that was a result of more than one search term was only counted in the number of the first search term tally, and not recorded in any subsequent search tally because it had already been identified for data collection.

The webpages included for data analysis were coded for content. Table 3 shows the three key areas identified through the initial content coding – Targeted learner groups, Strategic initiatives, and Processes – along with the number of webpages coded for that content. Some pages had cross-over between these three areas and were recorded more than once in the totals.

The second level of content coding identified the specific Targeted learner groups, and the specific Strategic initiatives. During this second level of coding, I realised that I could reject all but three webpages that were directly linked to the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative. But, the wider policy direction and the overall current published public stance on 'partnership' are relevant to the schema framing Ministry of Education expressions of 'partnership', so I continued coding the 170 webpages. This second level of coding is also shown in Table 3.

Table 3. *Ministry of Education: Coded pages related to content*

Code	Number of webpages
Targeted learner groups	92
Māori education	35
Pasifika	26
Special education (and ESOL)	18
Vocational youth education services	13

Strategic initiatives	100
Communities of learning Kāhui Ako	61
Investing in educational success	24
Better public services	11
Lifting the quality of initial teacher education provision	3
Asian language learning in schools	1
Processes	15
Consultations, working groups, and impact statements	15

The second level content coding was followed by a further level of content coding. This deeper content coding related specifically to the five identified Strategic initiatives. The Strategic initiatives pages advocated more specifically for cross-sectoral collaborative engagement than the other two areas (of Targeted learner groups and Processes). This does not mean that the Targeted learner groups area did not advocate for cross-sectoral collaborative engagement, merely that the presentation was more overt in the Strategic initiatives area (or that the page was a duplicate from the initial content coding). Consequently, the deeper content coding was only applied to the 100 pages within the Strategic initiatives area. This content coding enabled themes of 'systemic quality', 'agency', and 'knowledge' to emerge from the data set, as well as concepts related to the original search terms about 'partnership' and collaborative practice.

To improve reliability in the research, university webpages and school websites were also selected for analysis. University webpages related to the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative were identified as relevant to the study. In total, 11 university webpages that related directly to postgraduate initial teacher training at seven universities were identified. These webpages were coded for content ideas. I specifically noted any omission of ideas regarding themes that had emerged from the coding of the Ministry of Education data, as well as addressing how ideas of partnership and collaborative practice were expressed in the institutional context. Awareness of thematic omission is important to ensure internal validity in the data analysis (Hale & Napier, 2013). In the general university webpages, there were fewer direct references to ideas of 'agency' while themes of both 'systemic quality' and 'knowledge' were directly evident. Programme outlines available on the university webpages for papers in the postgraduate initial teacher education courses (a total of 103 sub-pages) were also coded to ascertain the published public stance of the university in relation to 'partnership' concepts. No additional themes related to partnership emerged from

coding the content of these university webpages or paper outlines. Table 4 indicates the number of pages and subpages included for analysis.

Table 4. *Universities: Number of pages included for analysis*

Postgraduate programme	Number of results	Paper outline sub-pages
Master level initial teacher education	6	55
Master level initial teacher education (Primary)	3	29
Master level initial teacher education (Secondary)	2	19

Schools that the universities identified on their webpages as being partners (in their postgraduate initial teacher education programmes) were intended to provide another context. One limitation of this research is that only one university listed the schools partnered with them in their postgraduate initial teacher education programmes.

However, those eight schools' public websites were searched for terms related to ideas of 'partnership' and collaborative practice. Similar to the way Ministry of Education pages were identified, the search function within each school website was used to return results. Where the school website did not include a search function, each navigational link was checked. Pages were rejected for analysis based on currency if they were not *updated* since 2015 (e.g., newsletters from 2014 were excluded). All webpages selected for analysis had omitted specific reference to school-university partnerships. This meant that I could reject all the school webpages based on relevance to the school-university partnership undertaken as part of the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative.

I chose, instead, to maintain the school sector as a context to understand broader educational concepts of 'partnership'. The webpages were not rejected as they constituted school published public stances in relation to institutional concepts of 'partnership'. Table 5 indicates the number of pages and sub-pages selected for analysis from partner schools.

Table 5. *Partner schools: Number of pages included for analysis*

Terms	Number of results included	Sub-page results
'cooperate' and 'cooperative'	11	0
'partner' and 'partnership'	16	0
'collaborate', 'collaborative' and 'collaboration'	5	0
'share' and 'sharing'	13	15
'together'	15	12
'community'	45	12

Note. Search terms are listed in same order as Table 1 and Table 2, i.e., not alphabetically.

For ease of comparison, only written text was coded and analysed. Two school websites included embedded multimedia objects, and six had embedded social-media objects. All the school websites included photographs. One university page included multimedia, and three included photographs. None of the Ministry of Education pages included photographs or multimedia. An analysis of multimedia, social-media, and photographs in terms of form, function, and content is an opportunity for further research into how institutions conceptualise and communicate ideas about 'partnership' in education.

The 144 school webpages were coded for content ideas, I specifically noted any omission of ideas regarding themes that had emerged from the content coding of the Ministry of Education data, as well as addressing how ideas of partnership, and collaborative practice, are expressed in the school-based institutional context. From this content coding, two new themes emerged in relation to the terms related to ideas of 'partnership'. These two themes were 'localisation' and 'engagement'. Primarily, these themes related to local school communities and parental engagement, but the themes were not limited to those specific contexts. The emergence of these new themes meant that the webpages in the data set (n100 Ministry of Education and n114 university) were reviewed, and re-coded for alignment or omission of these new themes.

The first stage of data collection from the Ministry of Education, universities, and schools, enabled me to begin applying a critical realist theorising process. This began with abductive processes to identify existing explanations, patterns, and demi-regularities that were apparent in the data. The conceptual frames that had arisen from the literature review about the function of partnership and roles of institutions added an initial means of seeking current explanations, as they identified some entities and attributes of partnership. I used an approach adapted from Sayer (2000) to begin trying to identify causative mechanisms, asking:

- What does the existence of this idea (an entity, e.g., 'community') presuppose?
- What are the pre-conditions for this practice (an entity, e.g., 'working together')?
- What conditions must the entity (e.g., 'partnership') have to exist?
- What is it about the entity (inherent attributes or properties) that enables/permits this entity to interact in certain ways?

In this way, I could begin to identify possible interconnections between the entities, their attributes, and the generative mechanisms influencing 'partnership'.

3.5.2.2 Stage two

A second phase of data collection was required because I needed to know more than just 'what' the institutions understood partnership to be, but 'why' each understood it that way. My research questions related to the purposes partnership serves, and the problems it is anticipated to resolve. Answers to these questions are relevant to how agents within the education system might 'think' partnership. Deeply analysing 170 webpages (refer Table 2) for the Ministry of Education argument supporting the 'why' of partnership was unfeasible, partly because many pages included the title *Communities of learning|Kāhui Ako* but other references to partnership terms were not apparent, or reference to any form of collaborative practice was limited to a sentence including the words 'work together'. Similarly, some pages in the Targeted learner groups area (refer Table 3) used a term, like 'collaboration', once on a page but the overall content did not relate to collaborative practice. I elected to focus on the 100 pages from the Strategic Initiatives area (refer Table 3) as a starting point for including webpages into analysis of the "argument for action" (Fairclough & Fairclough, 2012, p.30) because these had advocated more specifically for cross-sectoral collaborative engagement.

I selected Fairclough and Fairclough's (2012) model for political discourse analysis as a method to investigate the purposes partnership is intended to serve, and the problems it is anticipated to resolve. As the public education system in New Zealand has overtly political connections, primarily associated with the Ministry of Education but linked to Government's ten *Better Public Services* targets, the framework for political discourse analysis supports understanding of underlying systemic relationships.

Analysing political discourse from the perspective that it is an "argument for action" (Fairclough & Fairclough, 2012, p.30), for change in the world that leads to a more desired situation, provides a way of understanding not only how ideas of 'partnership' are presented by the Ministry of Education, but what social actions the argument is intended to foster. Adopting this approach to political discourse analysis, where discourse is primarily "argumentation for or against particular ways of acting" (p.1), permits analysis of how the argument is "supposed to transform the present set of circumstances so that they match the agent's goal" (p.45).

While the Ministry of Education is guided by international education and wider government policy frameworks, the Ministry of Education “is the Government’s lead advisor on the education system, shaping direction for education agencies and providers and contributing to the Government’s goals for education” (Ministry of Education, 2015d, para.1). Thus, at a policy level in New Zealand, the Ministry of Education understands its role as “shaping direction” (Ministry of Education, 2015d, para.1). Consequently, for the purposes of this research, the overall argument from the Ministry of Education is understood to present the future-state ‘imaginary’ and the underpinning values are suggested by the vision and purpose of the Ministry of Education (Ministry of Education, 2015c, 2015d).

This argument can be compared to the ways ideas about school-university partnership are expressed in websites of universities and schools engaged in partnerships through the *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative. Noting the similarities and differences in the way the Ministry of Education calls for action through argumentation and the actions taken by school-university partnership participants provides insight into ways that partnership is expressed, and understood, in a systemic context.

Government initiatives were a starting point for identifying this argument. The landing pages related to the *Investing in educational success* (Ministry of Education, 2014a) and *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiatives, were included for analysis. The landing page for *Communities of learning|Kāhui Ako* (Ministry of Education, 2016a) – that changed from being listed as a sub-initiative under the *Investing in educational success* initiative to become more of a ministerial direction during this research – was included. I was aware that the information selected was predominantly directed at school-based education. I selected the *Tertiary education strategy 2014-2019* (Ministry of Education, 2014c) and the *Centres of research excellence* (Ministry of Education, 2015b) landing pages to ensure that there was a cross-sectoral audience for the ways ideas about partnership and collaborative practice were communicated. Each of these landing pages was selected because it included background documents or links to further pages that would be relevant to wider critique. I also elected to specifically consider the *Teacher-led innovation fund* (Ministry of Education, 2015a) landing page because its filepath was under the *Investing in educational success* initiative but its hyperlink was from *Communities of learning|Kāhui Ako* which

suggested that the *Teacher-led innovation fund* aligned with the emergent *Communities of learning|Kāhui Ako* direction. The *Teacher-led innovation fund* landing page also mentions “academics” and “researchers” specifically (Ministry of Education, 2015a, para.6). Lastly, the information provided for postsecondary providers about *Communities of learning|Kāhui Ako* indicated that this emergent direction is strategically aligned toward cross-sectoral engagement, so this page was also considered (Ministry of Education, 2016b).

These seven pages, while not all specifically related to school-university partnerships, are expressions of initiatives and strategies that collectively construct an argument for a more collaborative approach within the education system. The further links embedded within the text of these pages were not analysed independently, but they were considered relevant as a foundation for the “argument for action” (Fairclough & Fairclough, 2012, p.30) in the subsequent conceptual critique. These chosen seven webpages and the embedded external links are listed in Table 6 (and are presented in the same order as above).

Table 6. *Government webpages selected for argument analysis*

Webpage analysed	Embedded links
Investing in educational success (IES) initiative (Ministry of Education, 2014a)	Agreement with the New Zealand Educational Institute/ Te Riu Roa Cabinet paper - 21 January 2014 Cabinet paper - 28 May 2014 Cabinet social policy committee minute - 28 May 2014 Key background policy documents The Ministry has been working with the sector Working group report Working with the sector Ministry settled agreements
Lifting the quality of initial teacher education provision (ITE) initiative (Ministry of Education, 2013)	Dispositions to teach: review and synthesis of current components and applications, and evidence of impact First evaluation report Initial teacher education outcomes Initial teacher education policy and practice: Final report, 2005 Learning to practise Research on initial teacher education in New Zealand: 1993-2004, 2004 University of Auckland (in conjunction with TeachFirst NZ) pilot programme

Communities of learning Kāhui Ako (Ministry of Education, 2016a)	Check out some achievement challenges Find a Community of learning Kāhui Ako Investing in educational success (IES) Joining or forming a Community of learning Kāhui Ako Map of all the Communities of learning Kāhui Ako across the country Principal recruitment allowance (PRA) Strength in numbers - the Auckland central Community of Schools Support available for schools and kura Teacher-led innovation fund Waitakere's collaborative approach
Tertiary education strategy 2014-2019 (Ministry of Education, 2014c)	Summary of submission The Tertiary education strategy 2014-2019
Centres of research excellence (CoRE) (Ministry of Education, 2015b)	Cabinet paper: Improving the performance of the Centres of research excellence (CoREs) Centres of research excellence (CoREs) - funding mechanism CoREs and a CoRE focused on Māori research from 2016 CoREs and effect – performance evaluation of the current seven CoREs Mission statement for the Centres of research excellence (CoREs) Review of Centres of research excellence discussion document Summary of feedback on CoRE review Tertiary education commission website
About the teacher-led innovation fund (TLIF) (Ministry of Education, 2015a)	Applying to the Teacher-led innovation fund (TLIF) Implementing a teacher-led inquiry: What matters? The essential guide to professional learning: Innovation (Australian Institute for Teaching and School Leadership)
Communities of learning - information for postsecondary education and training providers (Ministry of Education, 2016b)	Communities of learning Kāhui Ako Full list of achievement challenges to date Investing in educational success (IES) initiative

Analysis of these seven webpages using Fairclough and Fairclough's (2012) model for political discourse analysis would produce:

- a summary of the Government "argument for action" (Fairclough & Fairclough, 2012, p.30) related to the framing of the discourse of partnership in education

- an analysis of the “reasonableness” (Fairclough & Fairclough, 2012, p.76) of the “argument for action” (p.30)
- an analysis of how the “argument for action” (Fairclough & Fairclough, 2012, p.30) was expressed.

The Ministry of Education “argument for action” (Fairclough & Fairclough, 2012, p.30) is central to the research design because it allows me to identify a future-state ‘imaginary’ that aids in the analysis of the purposes partnerships serve. This also supports a better understanding of agency and social action, and leads toward an explanation of processes, practices, or conditions that may support the fulfilment of the future-state ‘imaginary’.

The findings of the more detailed political discourse analysis can be used to identify points of convergence or divergence with the first data set where concepts of ‘systemic quality’, ‘agency’, ‘knowledge’, ‘localisation’, and ‘engagement’ emerged through the content coding process. Critical discussion of these concepts is relevant to understanding the purposes ‘partnership’ may serve.

Using a critical realist process of retrodution and an explanatory critique enables me to review the frameworks for understanding that have been identified in the study. The critique draws on the concepts that emerged from the coding of the initial data set, and the findings of the political discourse analysis “argument for action” (Fairclough & Fairclough, 2012, p.30). The application of the process of retrodution can consider a range of data and prospective explanations, looking for a hypothesis that provides the most comprehensive account of the data and best explains the entity of ‘partnership’ within the education system.

Different analytical and theorising methods allow me to approach interdependent ideas from connected but distinct “perspectives” (Wimsatt, 1994, p.18). This can provide insight into the relationships between elements of the system, the underlying schema, and explain how ‘partnership’ might be understood by institutions. The integrated application of three analytical methods – political discourse analysis, explanatory critique, and critical realist theorising – gives a unique insight into current discourse around school-university partnerships in New Zealand education. These tools allow me to understand how concepts around partnership are currently presented and expressed. More so, the tools allow me to uncover the implicit assumptions and conceptual frameworks that encompass how the purposes of partnership are conceived, which

problems partnership is imagined to resolve, and the range of conditions necessary for partnership to fulfil those purposes in New Zealand education. The process enables me to make explicit how institutions (the Ministry of Education, universities, and schools) currently 'think' partnership.

3.5.3 Design limitations

Any study of a complex system should recognise that “causal-thickets” (Wimsatt, 1994, p.5) exist as the norm. This, in itself, could be perceived as a limitation to the research design. Certainly, the dynamic nature of the system has resulted in difficulties ‘pinning down’ data from the Ministry of Education webpages. During the study *Communities of schools* – that began as one of three sub-initiatives under the overarching *Investing in educational success* (Ministry of Education, 2014a) initiative – became *Communities of learning*|*Kāhui Ako* (Ministry of Education, 2016a). This has emerged as a much more important element of the Government’s policy direction. The change was summarised in the *Education Review* (Barback, June 2016):

In the movie version of Communities of Learning, the opening scene would probably start with a grainy flashback to January 2014 when the Prime Minister announced a “flagship policy” for education – the \$359 million Investing in Educational Success initiative.

Cut to sector leaders, sporting expressions somewhere between confused and impressed, scrambling to make sense of it all, suspicions aroused by the lack of consultation.

It would then fade to the present: a sharp, clear, bright, full-colour image of Communities of Learning (CoL) as they stand today. (para.2-5).

The *Education Review* summary provides one perspective on the change. It also illustrates how a significant change can occur in a relatively short amount of time. The change occurred within a wider context of a public consultation about the *1989 Education Act*, and legislative changes “to better support an evolving education system” (Ministry of Education, 2016c, para.2). The wider contexts impact on what occurs within the education system, thus limiting the capacity of the research design to effectively map a shifting conceptual landscape. The impact on the study was that data collected from the Ministry of Education website was in a state of flux. To overcome the limitation of systemic interactions, I kept up to date with wider educational reporting in New Zealand media and regularly re-checked the Ministry of Education website changes that occurred as a result of the shift in policy direction. I took these changes into account as the study progressed by using an iterative process to collect and code the search

results in the three contexts until the final data analysis in September of 2016. Nevertheless, this research is, fundamentally, an explanation of the implicit assumptions and hidden conceptual frameworks that exist 'in a moment', and does not purport to untangle the "causal-thickets" (Wimsatt, 1994, p.5) of an open social system.

There are other limitations to the design. These are primarily linked to the scope of possible data sources within the system. The choice to include only data from the published public stance of institutions contributing to the discourse of school-university partnerships in New Zealand was a conscious research design decision, and it has an impact on what can be discovered. It meant a lot of data, especially about early childhood education or community-driven partnerships, was excluded. These arena for partnership in education may overlap and interlace with schools and university partnerships, so the research design choice may have prevented important perceptions and expressions about 'partnership' from being analysed. Equally, the choice to focus on written texts excluded understandings that could be garnered from analysis of multimedia, photographs, and embedded social-media objects on webpages.

The design choice to include only data from the published public stance of institutions contributing to the discourse of school-university partnerships in New Zealand limits opportunities for data triangulation, to the point that it can be argued it constitutes a methodological flaw. The critical realist researcher advocates for multiple types of data to be included, and for mixed-method approaches, because this provides a more complete evidence-base from which explanatory theories can be postulated. I have attempted to limit the impact of my choice by including three contexts – the political "argument for action" (Fairclough & Fairclough, 2012, p.30) presented by the Ministry of Education, universities offering postgraduate initial teacher education programmes incentivised under the *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative, and school partners engaged in the 'clinical practice' postgraduate teacher education models – to give a more reliable evidence base for the critical realist theorising method. In total, 428 webpages were included for analysis in this study (40% from the Ministry of Education website, 26.5% from university websites, and 33.5% from school websites). Of these, deeper content coding was applied to 358 webpages, and five concept themes emerged. I also chose to use frameworks for understanding that emerged from a wide literature review in different fields to begin

abductive and retroductive theorising processes. I acknowledge the choice of data type and lack of triangulation as limitations, indeed, as opportunities for further research. But I also believe I've mitigated the impact. I have explored an area where there is scant existing research, and am able to contribute a tentative explanatory theory about how implicit assumptions and schema expressed by educational institutions might influence the discourse of 'partnership' in New Zealand.

Lastly, the research design intended to analyse the websites of the school sector partners engaged with the postgraduate initial teacher education qualifications. This intention was to compare the institutional understandings of 'partnership' related to *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative with those expressed by university partners. Of the seven universities offering the new postgraduate initial teacher education programmes, only one identified its partner schools. While those eight school websites were accessed, no evidence specific to their school-university partnership was publicly available. This lack of evidence related to school-university partnership is highly relevant for a critique of institutional understandings within the system. The search terms did yield results on those school websites and provided themes, so these proved useful to highlight systemic understandings of 'partnership'. Nevertheless, the lack of identified partner schools undermined research design intentions specifically related to school-university partnerships.

The research design provided the capacity to notice emergent patterns or trends of interaction within the system as a whole. An explanation of the conditions for emergence can be derived from a focus on the published public stance of institutions engaged in discourse about partnerships using the selected methods. Overall, there are limitations to the research design but these present, for the most part, opportunities for further research.

CHAPTER FOUR: FINDINGS

4.1 Overview

This chapter outlines key findings of the study. The methods involved in this investigation were threefold and, while it is acknowledged that these methods are interrelated, each will be dealt with separately below.

This chapter summarises, analyses, and explains the Ministry of Education's argument for action in relation to 'partnership'. It then notes the relationship of university and school webpages to the Ministry of Education's argument for action.

The chapter goes on to critique and explore concepts of 'systemic quality', 'agency', 'knowledge', along with concepts of 'localisation', and 'engagement'. The critique relates to how different institutions express and present a publicly published stance about 'partnership'.

This chapter identifies the necessary and contingent elements of the 'partnership' entity, and theorises an explanation for how 'partnership' might be currently understood in New Zealand education.

Finally, this chapter provides an answer to the research questions.

4.2 Ministry of Education argument for action

The next sections analyse the Ministry of Education's argument for action. It begins by describing the type of argument, and summarising the claims and premises. Next, it analyses the reasonableness of the overall argument using Fairclough and Fairclough's (2012) extended pragma-dialectical model (refer Section 3.5.1.3). Then it analyses and critiques the Ministry of Education's expression of the claims and premises as parts of the argument. Finally, it identifies the implicit assumptions suggested in the Ministry of Education's argument.

4.2.1 Summary of the Ministry of Education argument for action

Overall, the Ministry of Education webpages present a conductive argument. In the case of the Ministry of Education's published public stance, the webpages progress the argument using practical reasoning (refer Section 3.5.1.3). This suggests that the Ministry of Education

argument is presented in a context of change, “uncertainty, risk and ... disagreement” (Fairclough & Fairclough, 2012, p.17). The Ministry of Education’s argument is summarised, using Fairclough and Fairclough’s (2012) model (refer Section 3.5.1.3), in Figure 3 and Table 7.

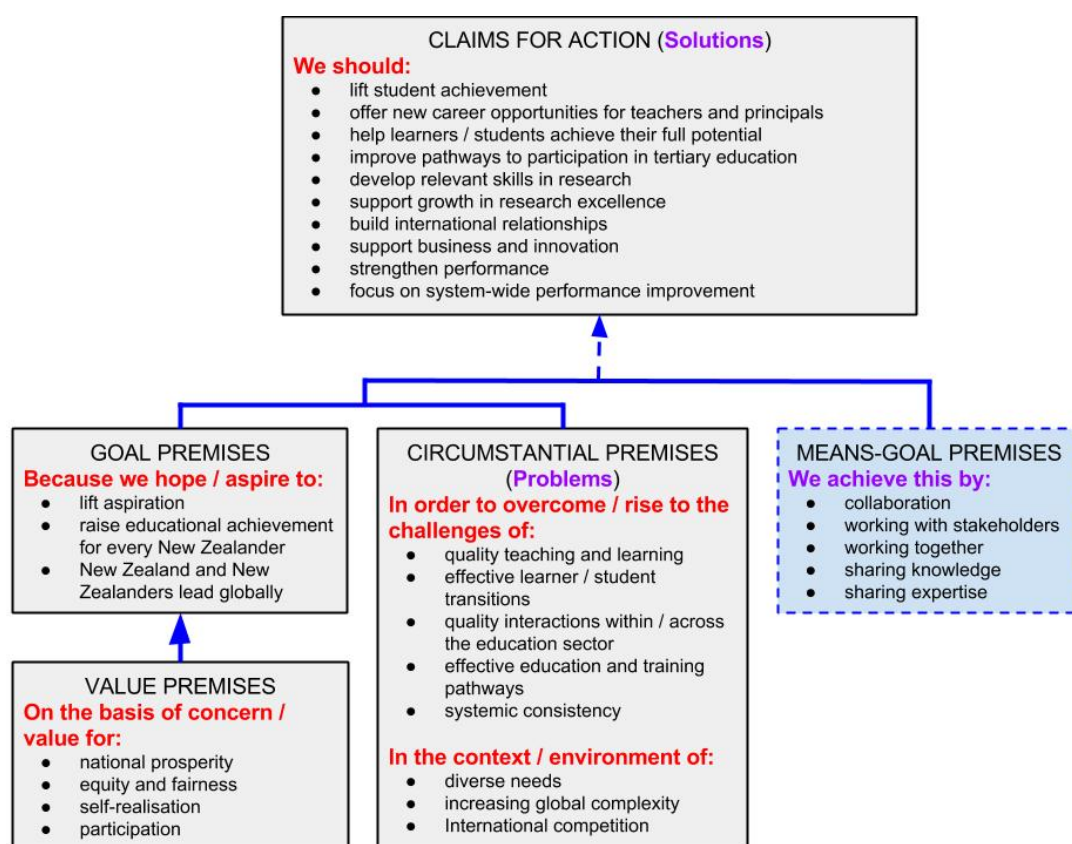


Figure 3. Summary of Ministry of Education’s argument.

Table 7. Summary of the Ministry of Education’s argument

<i>Claims (solutions)</i>	<p>We should:</p> <ul style="list-style-type: none"> lift student achievement offer new career opportunities for teachers and principals help learners / students achieve their full potential improve pathways to participation in tertiary education develop relevant skills and research support growth in research excellence build international relationships support business and innovation strengthen performance focus on system-wide performance improvement
<i>Circumstantial premises (problems)</i>	<p>In order to overcome / rise to the challenges of:</p> <ul style="list-style-type: none"> quality teaching and learning effective learner / student transitions quality interactions within / across the education sector effective education and training pathways systemic consistency

	In a context / environment of: <ul style="list-style-type: none"> • diverse needs • increasing global complexity • international competition
<i>Goal premises</i>	Because we hope / aspire to: <ul style="list-style-type: none"> • lift aspiration, raise educational achievement for every New Zealander • New Zealand and New Zealanders lead globally
<i>Value premises</i>	We must achieve our goals on the basis of concern / value for: <ul style="list-style-type: none"> • national prosperity • equity and fairness • self-realisation • participation
<i>Means-goal premises</i>	Our goals will be achieved by: <ul style="list-style-type: none"> • collaboration • working with stakeholders • working together • sharing knowledge and expertise

Note. Adapted from *Political discourse analysis: A method for advanced students* (p.125). Copyright 2012 by Isabela Fairclough and Norman Fairclough. Reprinted with permission.

4.2.2 Reasonableness of the Ministry of Education argument for action

Given all that is known and valued, is the proposed course of action a reasonable course of action?

The Ministry of Education webpages present more than one initiative. The webpages present a solution that has multiple parts. In this manner, the texts include an overarching plan, a set of interconnected measures, intended to take the education system from the current, undesirable, situation into a future-state where every New Zealander possesses the highest aspirations, and achieves the highest educational outcomes (Ministry of Education, 2015c, 2015d). The undesirable situation, where there is a problem with quality, consistency, and effectiveness – of teaching, of transitions and pathways, of performance, and of interactions within and outside the sector – must be changed so that New Zealand can lead globally and meet other value premises (Ministry of Education, 2015c). The Ministry of Education employs an underlying argument to formulate the means-goal premise:

that the problems faced are systemic
that no one agent, or institution, alone can achieve the goals
therefore, we must work together to undertake the solutions.

The process by which the problems will be resolved, and solutions enacted, is presented in terms of collaborative participation.

a) *Is the current situation presented in a way that is rationally acceptable?*

The Ministry of Education's argument was considered to evaluate a "reasonable decision" (Fairclough & Fairclough, 2012, p.63). This evaluation requires an analysis of the current situation, the problems faced. Aside from the background documents cited on the webpages, there is information from a variety of other sources (Bacchetta, Ekkehard, & Bustamante 2009; Brondizio et al., 2016; Brynjolfsson & McAfee, 2011, 2014; Cheng, 2016; Cheng & Yip, 2006) indicating that the context of increasing complexity in a globalised world is "rationally acceptable" (Fairclough & Fairclough, 2012, p.52). There is also information suggesting the education system encounters diverse learner needs, including Māori, Pasifika, and special needs learners (New Zealand Government, 2017). The problems of quality, consistency, and effectiveness of elements of the education system can be identified by considering national achievement outcomes, transitions data, and international comparisons (New Zealand Government, 2017). While these performance measures may be debated (and debatable), the circumstantial premises, or the 'problems' described are "rationally acceptable" (Fairclough & Fairclough, 2012, p.52).

b) *Is the solution presented offering sufficient resolution of reasonable disagreement?*

i. *Has a reasonable deliberative process been followed?*

On the seven webpages analysed, the Ministry of Education supports the claims for action (solutions) with hyperlinks to background cabinet papers (Ministry of Education, 2014a, 2015b) and research documents (Ministry of Education, 2013, 2014a, 2015a). These hyperlinked documents give provenance to many of the actions claimed as solutions to the circumstantial problems and support the implicit idea that a reasonable deliberative process has been followed before the course of action was decided.

Equally, the solutions are linked to the problems. The claim that we should "focus on system-wide performance improvement" (Ministry of Education, 2014c, section.10) targets the problems of quality, consistency, and effectiveness in a complex context. This connects to the problem of

increased global complexity and systemic consistency in the circumstantial premises. There are multiple links between the identified problems that the solutions are premised upon (e.g., the problem of diverse needs or effective student/learner transitions could be addressed in the solutions of help learners/students achieve their full potential, improve pathways to participation in tertiary education, and lift student achievement). These connections between problem and solution also support the implicit idea that a reasonable deliberative process has been followed.

- ii. *Is the proposed course of action more/less likely to positively/negatively impact the future 'imaginary'?*

To offer “reasonable disagreement resolution” (Fairclough & Fairclough, 2012, p.63) the Ministry of Education argument must indicate that a reasonable deliberative process was followed, as well as provide reasons to limit active opposition to the proposed course of action.

To reasonably disagree with the claims for action is to argue a case that the consequences of these actions will *negatively impact* on the normative goals and values (Ministry of Education, 2015c, 2015d) presented. To reasonably disagree, any opposition will need to argue that the proposed course of action “undermines the stated goal of action” (Fairclough & Fairclough, 2012, p.156). The Ministry of Education’s use of a conductive argument poses difficulties in constructing a case to reasonably disagree with the course of action. Even if one claim for action (e.g., ‘offer new career opportunities for teachers and principals’) can be argued to undermine one value premise (e.g., ‘national prosperity’) on rationally acceptable grounds (e.g., it may require increased taxpayer spending) the overarching course of action, when all claims are taken as a whole, is *less likely* to undermine the stated values and goals. In this manner, the argument offers sufficient resolution of reasonable disagreement.

- c) *If we undertake this process, can we expect to undertake the actions claimed (and achieve our goals)?*

Finally, critically questioning the reasonableness of the Ministry of Education’s argument means that the means-goal premise has to be analysed. The circumstantial premises and claim for action allow for different processes to realise the future-state ‘imaginary’. The means-goal premise in the Ministry of Education’s argument is a key to analysing concepts of ‘partnership’ – such as working together, sharing expertise, collaboration (Ministry of Education, 2013, 2014a,

2014c, 2015a, 2015b, 2016a, 2016b), and the processes assumed to underlie them. The means-goal premise essentially states everybody must 'pitch in' to get the work done.

Evaluating this premise is complicated by its apparent simplicity, and by the overarching plan presented in a conductive argument. Questioning the means-goal premise requires asking whether by working alone, or in isolation, the claims could be enacted. When faced with circumstances of systemic flaws and complexity, then working alone or in isolation would not be a process where agents can expect to undertake every one of the actions claimed. Thus, collaboration is a reasonable process by which all the claims can be enacted. A reasonable decision resulting from the argument is to collaborate, to share knowledge and expertise. This means-goal is adopted in order to enact the solutions claimed, which will permit transformation from the problematic current situation into the future-state 'imaginary'.

The complexity of the conductive argument, with multiple claims for action proposed in the course of action, sways the audience toward a conclusion of collaborative action. The complex interplay of Ministry of Education initiatives (of which two of 22 were accessed to be analysed), along with Further Education strategies (of which one of eight was accessed to be analysed), among other Government policy directions, does support the reasonableness of a normative decision; we need to work together.

The Ministry of Education's argument for action can be considered reasonable given what is known and valued.

4.2.3 Elements of the Ministry of Education argument for action

The argument for action suggests that the purpose partnership (and collaborative practices) serves is to improve systemic quality, consistency, and effectiveness toward the aim of a more prosperous and participatory future where New Zealand, and New Zealanders, lead globally.

4.2.3.1 Claims for action

The concepts around ‘partnership’ are expressed with a deontic modality (i.e., indicating how the world should be). This suggests everyone *ought* to be concerned with the future-state ‘imaginary’ presented.

There is a presumption that the claims for action are, when aligned with the underlying values, goals, and circumstantial premises, normatively appropriate (acceptable) actions. The claims for action are a presumptive means to a desirable end, that is, we *should* do these things to bring about the future-state ‘imaginary’ where the underlying goals are realised.

4.2.3.2 Values premises

The underlying values premises are aligned with a purpose that includes “every New Zealander” (Ministry of Education, 2015c, 2015d) which further indicates a deontic modality. Essentially, these values *should* concern every person in New Zealand because they each have a personal stake.

Not every agent in the system will hold the underlying values as important. The underlying values may not be sufficient to support a claim for action or to motivate an agent into action. But, they presuppose a commitment to, a binding moral duty to, or an “obligation” as a citizen to, their importance and relevance (Fairclough & Fairclough, 2012, p.42). The desire to act or support others’ actions to fulfil the values may arise from the fact an agent intrinsically supports them. The desire to act or support others’ actions to fulfil the values may arise from an agent, as part of the social or institutional order, being bound by extrinsic value commitments. There is a presumed normative commitment to the values. Thus, a future-state in which these values are more fully realised or fulfilled, *should* be both desired and desirable.

4.2.3.3 Goal premises

The purpose statement from the Ministry of Education (2015c) is to “Lift aspiration, raise educational achievement for every New Zealander” (para.2). This is the overarching future-state ‘imaginary’ where every New Zealander possesses the highest aspirations and achieves the

highest educational outcomes. This future-state 'imaginary' is the one to which the Ministry of Education intends for the audience to aspire.

Using the imperative, alongside the determiner "every" (Ministry of Education, 2015c, para.2), is persuasive. These grammatical structures serve to connote an unwavering determination, and a resolve on behalf of the Ministry of Education to fulfil their goal and purpose. This structure does not identify what the aspirations of New Zealanders will be lifted toward, nor to what level educational achievement will be raised. Grammatically, the process of 'lifting' and 'raising' is implied and, thus, fulfilment of the purpose is an ongoing process. The future-state 'imaginary' presented in this goal premise is personally rewarding ("aspiration"), successful ("achievement"), and egalitarian ("every") (Ministry of Education, 2015c, para.2). It is also a future-state that is forever on the horizon as the nation sails toward it.

The goal premises in the seven texts are presented with the promise of the future-state 'imaginary' lacking a definitive end-point – to raise, to develop, to build, to lift, to strengthen (Ministry of Education 2013, 2014a, 2014c, 2015a, 2015b). The exceptions are the two *Communities of learning*|*Kāhui Ako* webpages where the future-state 'imaginary' is one where individuals "achieve their full potential" (Ministry of Education, 2016a, para. 1, 2016b, para.1). The goal premises contained in the *Tertiary Education Strategy 2014-2019* and the *Centres of research excellence* webpages are more overtly linked to the outcomes of the education system, where contribution and impact occur in the "positive social and economic benefits" (Ministry of Education, 2015b, para.5) to New Zealand. This connects to a neoliberal perspective where social and economic benefit is assumed to be inherently measurable. The future-state 'imaginary' presented is a New Zealand that is innovative, successful, and internationally competitive. It includes individuals who can "participate effectively" (Ministry of Education, 2014c, para.7) across sectors and institutions. In this future-state 'imaginary', education is the promised "passport to success" (Ministry of Education, 2014c, para.4) for both individuals and society.

4.2.3.4 Circumstantial premises

The circumstantial premises presented in the Ministry of Education texts are not explicit. The 'problem' with the current state is implied in the texts. The audience is left to infer the 'problem'

with the current state, as the circumstantial premises raise questions about the quality, consistency, and effectiveness of: teaching; transitions and pathways; performance; and interactions within and outside the sector.

The structure and high-level modality expressed in the circumstantial premises supports the audience to make these inferences. The *Investing in educational success* (Ministry of Education, 2014a) webpage states: “Research shows that quality teaching has the biggest influence on whether learners succeed. IES has been designed with this in mind and is intended to raise student achievement” (para.3). This implies a current lack of “quality teaching” within the system by utilising high-level modality, such as “shows” or “biggest”, “has been”, and “is” (Ministry of Education, 2014a, para.3). The logical structure of the two premises, when applying the principle of equivalence, encourages an audience to deduce a current problem with quality teaching because:

if quality teaching is equivalent to learner success
and
IES is equivalent to learner success
then
IES is equivalent to quality teaching
therefore
anything other than IES is not equivalent to quality teaching.

The Ministry of Education does not explicitly state ‘there is a problem with teaching quality’, or ‘there is a problem with pathways and transitions’, or ‘there is a problem with stakeholder interactions’ in the texts. The *Centres of research excellence*, *Lifting the quality of initial teacher education provision*, and *Tertiary Education Strategy 2014-2019* webpages do identify needs: the “need to develop a more consistent approach to performance measurement” (Ministry of Education, 2015b, para.9); the “need to determine and articulate clearly the fundamental goals of ITE” (Ministry of Education, 2013, para.14); the “need to build international relationships that contribute to improved competitiveness” (Ministry of Education, 2014c, para.1). These ‘needs’ do not directly state a problem, rather they each imply that in the current circumstances this ‘need’ is yet to be met. The problem is expressed strongly, but implicitly. Thus, any specific problem with the current situation is inferred by the audience and, consequently, is ill-defined.

The inferred problem arising from the circumstantial premise that “Teachers need the right mix of competencies to enable all young people to develop knowledge, skills and values to be successful in an increasingly complex world” (Ministry of Education, 2013, para.12) supports inferred reasoning for why there are changes being made to initial teacher education in New Zealand. That is, currently, teachers do not possess “the right mix of competencies” to enable “all young people” (Ministry of Education, 2013, para.12) to succeed. The role of the teacher, “to enable” (Ministry of Education, 2013, para.12) supports the value premise of self-realisation. A teacher’s role is to empower young people – through development of knowledge, skills and values – and facilitate their success. The “right mix” of competencies required of teachers in this premise is necessarily vague, as the learning contexts for “all young people” (Ministry of Education, 2013, para.12) will differ. This indicates that teachers are required to be adaptable to unknown circumstance “in an increasingly complex world” (Ministry of Education, 2013, para.12) as much as the young people they teach. The inherent adaptability that teachers need politically frames ‘quality teachers’ as competent in multiple contexts. The circumstantial premise supposes that ‘quality’ initial teacher education programmes will provide opportunities for graduating teachers to possess and demonstrate, this “right mix” (Ministry of Education, 2013, para.12) of competencies. The use of circumstantial premises that raise questions implicitly about the current quality and effectiveness of the system, relates to a systemic improvement narrative.

4.2.3.5 Means-goal premises

‘Partnership’ concepts are the means-goal premise supporting the Ministry of Education’s claims for action. The Ministry of Education frames an argument for action utilising a means-goal premise of collaboration, sharing knowledge, sharing expertise, and working with a range of stakeholders (Ministry of Education 2013, 2014a, 2014c, 2015a, 2015b, 2016a, 2016b). The means-goal premise includes localised solutions that are centrally endorsed. Endorsed local solutions are resourced with time and funding. The Ministry of Education, when situating its place in this system, utilises verbs – such as ‘enabling’, ‘strengthen capability’, ‘equip’, ‘support’, or ‘help’ – which strongly suggests that the role of the Ministry is to create the conditions that make it possible for the education system to “lift aspiration, [and] raise educational achievement for every New Zealander” (Ministry of Education, 2015c, para.1). The statements, “We need to

think more about how we can deliver the results we will need in the future” (Ministry of Education 2014c, para.9), and “develop our collective knowledge base” (Ministry of Education, 2013, para.15), utilise collective personal pronouns which indicates they offer inclusivity, and suggests that solutions arise from collaborative models. From the language used in the texts, it can be inferred that the Ministry of Education’s role is to empower and facilitate, rather than to subordinate and mandate, stakeholder action toward achievement of the goal. There is alignment in the Ministry of Education’s role to empower and facilitate systemic supports that provide the conditions for improvement with that of teachers roles “to enable” (Ministry of Education, 2013, para.12) all young people to succeed.

Six of the Ministry of Education webpages analysed for argument do not specifically mention ‘partnership’, but all use a form of the phrase ‘work together’. The *About the teacher-led innovation fund* page does refer to how Ministry of Education funding “provides an opportunity” for teachers to “work in partnership with experts” (Ministry of Education, 2015a, para.6). The Government’s role is provision of opportunity. The means-goal premise prompts the engagement of agents to collectively identify opportunities. The means-goal assumes agents can take advantage of relationships across organisations or between sectors (Ministry of Education, 2013, 2014c, 2015a, 2015b, 2016b). This links to a non-interventionist, distributed, neoliberal agenda, and has implications for notions of agency within the system.

4.2.4 Implicit assumptions

The Ministry of Education’s goal premises (the future-state ‘imaginary’) have no clear end-point. This suggests that striving to fulfil the goals is continuous. Continual striving toward realisation of the underlying values, and toward ‘better’ collaboration, is supported by the Ministry of Education using implicit circumstantial premises, where both the ‘problem’ and ‘solution’ can be inferred. Thus, the Ministry of Education’s argument for action suggests that the problems partnership (and collaborative practices) are intended to resolve are systemic – quality, consistency, and effectiveness – and complex. The conditions necessary for partnership to fulfil its purpose are presented as the Ministry of Education providing opportunity for ‘better’ collaboration, while agents within the system consciously engage in taking advantage of those opportunities to improve the system from within a localised context.

Key implicit assumptions about partnership expressed in this political argument for action are:

- collaboration provides a **means to act** toward resolution of complex and dynamic problems;
- systemic quality, consistency, and effectiveness **can be improved** through supporting collaborative processes;
- agents within the system **have the capacity** to take advantage of, and act on, opportunities provided;
- localised solutions within the system can serve **wider** systemic purposes.

This argument for action suggests that partnership encourages interaction, concurrently at local and systemic levels, toward shared goals, and a shared future-state 'imaginary'.

4.3 University webpages' relationships to the Ministry of Education argument

This section details an instantiation of the Ministry of Education's argument for action. It is related specifically to the claims we should; lift student achievement, help learners achieve their full potential, develop relevant skills and research, and focus on system-wide performance improvement. Postgraduate programmes, incentivised under the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative, provide information at the level of systemic interaction about how the Ministry of Education's policy argument is enacted.

These master-level programmes were initially offered at only three institutions, as exemplary initial teacher education programmes (Ministry of Education, 2013). The Master of Teaching and Learning (or Master of Teaching at the University of Auckland) programme is now offered at seven universities, with six institutions offering the qualification for both Primary and Secondary teacher education programmes, and one university offering it for only Primary teacher education. One of these programmes is offered in partnership across two universities.

The target audience for these webpages are "top graduates" (University of Otago, n.d., para.2) – expected to have achieved at least a B or B+ average in a bachelor's degree, depending on the institution. Offering the qualification arises from a view that: "New Zealand needs more teachers who are committed to making significant improvements in the learning and engagement of young learners from all backgrounds and in all circumstances" (University of Auckland, n.d., para.1). This view aligns with the Ministry of Education's circumstantial premise

that there is a current systemic ‘problem’ with a lack of ‘quality’ teachers. This view also supports the systemic improvement narrative by implicitly challenging teachers’ functional responsibilities. Teachers are not only responsible for ensuring the learning of the young people in their classrooms, but their responsibility extends to an active contribution to the improvement of the system as a whole. Because New Zealand requires more teachers committed to improving learning and engagement for learners “from all backgrounds and in all circumstances” (University of Auckland, n.d., para.1), that commitment is impossible to demonstrate in any single school context, so must be demonstrated systemically.

The one-year postgraduate masters programmes – described variously as, “leading new innovations” (University of Auckland, n.d., para.13), “intensive”, (University of Waikato, n.d., para.1) “future-oriented” (Auckland University of Technology, n.d., para.6), “cutting-edge” (Massey University, n.d., para.3) and “prestigious” (University of Otago, n.d., para.2) – are all based on collaborative models of practice. A “significantly different approach” (Ministry of Education, 2013, para.2) to the intersection of theory and practice is a key focus of ‘quality’ initial teacher education, and of these programmes. Five of the seven universities explicitly mention partnership, while another notes that the delivery model is one of an “integrated internship” (Victoria University of Wellington, n.d., para.4). The collaborative means-goal premise toward Ministry of Education goals is supported in this way by most of the universities.

These university webpages contribute to the ‘partnership’ discourse, and provide evidence that action is being taken under the Ministry of Education’s (2013) *Lifting the quality of initial teacher education provision* initiative. These webpages collectively present a position that aligns with the inferred circumstantial premise that there is a problem with the quality, consistency, and effectiveness of teaching. Utilising language such as, “new” (University of Canterbury, n.d., para.1), “innovations” (University of Auckland, n.d., para.13), “future-oriented” (Auckland University of Technology, n.d., para.6), and “cutting-edge” (Massey University, n.d., para.3), supports problematising both the current situation, and prior solutions, in favour of a model that better matches the future-state ‘imaginary’. Equally, the university webpages analysed support the means-goal of enacting the policy direction by advocating partnership processes, and implicitly orienting future teachers toward a systemic understanding of their role.

4.4 School webpages' relationships to the Ministry of Education argument

This section details how schools publicly express an instantiation of the Ministry of Education's argument for action. It is not specifically related to partnerships in place under the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative because only one university identifies the schools with whom it operates in partnership. None of the school webpages analysed mention this initial teacher education partnership arrangement.

The omission of information about an initial teacher education partnership is relevant and noteworthy because it highlights a lack of systemic, institutional engagement with the Ministry of Education's argument. The omission is perhaps explained by the primary audience of the school websites. The content of the school websites indicates that the audience is parents, whānau, and children, within the school and local community. This audience may not lead a school to prioritise information about how the institution is contributing to systemic improvement in education for New Zealand, instead focusing on communication, current school events, and useful day-to-day information (Balmoral School, Home, n.d.).

The schools may also refrain from publicly sharing with their community that they are engaged in a partnership based on the circumstantial premise that there is a current systemic 'problem' with a lack of 'quality' teachers in New Zealand. Universities seeking to attract applicants who are able to address the 'problem' of 'quality' teachers have greater alignment on their webpages with the Ministry of Education's circumstantial premise for the *Lifting the quality of initial teacher education provision* initiative. Schools, who may not wish to publicly imply that there is a 'problem' with a lack of 'quality' teachers, do not align their expressed concepts of 'partnership' with contributions to the wider education system.

Schools express concepts of partnership primarily through how interactions between the school, parents, whānau, and children are fostered. The idea of 'community' is strongly presented on school webpages and is linked to: class or year-group communities (Balmoral School, Class Blogs, n.d.; Belmont Primary School, n.d.); place and local community engagement (Birkdale North School, n.d.; Puhinui School, n.d.); and collectively drawing on a range of expertise for the education of young people (Murrays Bay Intermediate, n.d.; Papatoetoe West School, n.d.). The localised 'solutions' offered by concepts of a community working together – from walking

school-bus initiatives, to specialists from the community sharing their knowledge to teach students creatively – are not presented by schools as contributing to identified educational aims or specific achievement challenges but, rather, are linked to notions of fostering belonging and active citizenship; e.g., “a vibrant and collaborative learning community with a clear focus on producing good citizens” (Puhinui School, n.d., para.4).

The fact that schools publish any public stance on collaborative models of practice for education suggests some alignment with the Ministry of Education’s means-goal premise. For schools, the focus of this model of practice is outward facing, seeking and demonstrating connection with those who do not actively identify as a part of the education system (e.g., parents, whānau, community specialists). Existing school partnerships within the education system – which may include school-university partnerships or structured relationships with other schools, institutions, or training providers – are not explicitly mentioned. Thus, the school webpages do not explicitly support the Ministry of Education assumption that localised solutions within the system can serve wider systemic purposes.

4.5 Conceptual analysis

Concepts that emerged from the content coding of Ministry of Education webpages (related to Strategic initiatives) included themes of ‘systemic quality’, ‘agency’, and ‘knowledge’. Additional concepts, of ‘localisation’ and ‘engagement’, emerged from analysis of school partner websites.

The next sections explore and explain these five key concepts, which contribute to institutional published public stances on ‘partnership’. They explore underlying schema that support understandings of these five key ideas. These concepts in the discourse related to school-university partnerships provide insight into relationships between institutional elements of the system, and help to explain how ‘partnership’ might be currently understood.

4.5.1 Concepts of quality in the system

A ‘quality’ education system is a concern of the Ministry of Education. Pages related to the *Investing in educational success* (2014a) initiative cite data from the Organisation for Economic

Co-operation and Development (New Zealand achievement story: The evidence base, n.d.), and explain (Cabinet Office Wellington, 2013):

Reviews into teaching and leadership have highlighted system weaknesses, and reports over the last decade have revealed a slow decline for some New Zealand students in comparison to their overseas counterparts. Weaknesses have been identified in how teachers are developed, trained, evaluated, rewarded and promoted. (para.3).

Using Organisation for Economic Co-operation and Development data, and citing international comparisons, firmly sets Government action upon a research base from the field of comparative education. Comparative education is where education “systems and their relations with intra- and extra-educational phenomena within two or more nations (or regions, cultures, societies) constitute its object of study” (Manzon, 2011, p.176). From a neo-institutional theoretical perspective, the relationship between educational institutions and their context is important in the formation, and change, of both the institution and community. A neo-institutional perspective views education as both a “global institution and as a locally situated process” (Wiseman, Fernanda Astiz & Baker, 2013, p.688). The concept of a high-performing education system expressed by the Ministry of Education is linked to both neoliberal policy, and neo-institutional ideas of global educational cultures. Issues of ‘quality’ are related to high-performing education systems, and the primary concern of ‘quality’ is related to New Zealand’s international ranking (Our proposition: Aotearoa New Zealand - The world’s number one education system, 2014). The Government emphasises notions of systemic improvement “in how teachers are developed, trained, evaluated, rewarded and promoted” (Cabinet Office Wellington, 2013, para.3) to ensure a ‘quality’ education system and to raise the international ranking. This is also evident in the *Tertiary Education Strategy 2014-2019*, and *Centres of research excellence* webpages where the contribution of a high-performing tertiary sector to national and international success is explicitly mentioned.

The “System expectations and delivery” section of the *Tertiary Education Strategy 2014-2019* (Ministry of Education, 2014c) utilises the term “system” fifteen times. It employs language such as “improving system-wide performance” (Ministry of Education, 2014c, section.10, para.7), and acknowledges a need for both holistic – “The Ministry of Education will ensure ... system settings support” (Ministry of Education, 2014c, section.10, para.27) – and localised – “a role in delivering on this strategy ... will need to consider how they can best contribute” (Ministry of

Education, 2014c, section.10, para.30) responsiveness. This is consistent with a narrative where 'quality' is equivalent to adaptability and responsiveness to an unknown future. Linking concepts of 'quality' to responsiveness aligns with educational futures literature. This direct link is apparent in 11 other Ministry of Education webpages analysed. It is not so much that New Zealand education has an explicit and definable problem with teaching quality, but that the systemic conditions supporting those elements may not be as adaptable as the conditions in other high-performing systems. This suggests the concept of 'quality' is not static and is, primarily, comparative.

A dynamic and comparative concept of 'quality' means the end-point of improved teaching quality is unknown. Improved global competitiveness, and improvements in the skills of a participatory workforce, are problematised by the fact they require improvement alongside an underlying need to "build on this [current] progress" (Ministry of Education, 2014c, para.6). There is an inherent 'not good enough yet' premise for action across the system. The processes of improvement are constant and dynamic, and an end-point cannot be explicitly quantified (except in comparison to other systems also engaged in dynamic processes). Without a static definition of 'quality', the concept of 'quality' in education will continually represent the promise of something 'better' than the current state.

The texts indicate that the dynamic promise of achieving a 'quality' education system can be resolved through promoting adaptability and responsiveness to unknown or unforeseen circumstance. This is both at a systemic level, where education strives for international competitiveness, and at an individual level, where teachers strive to utilise their "right mix" (Ministry of Education, 2013, para.12) of "knowledge and skills to make a positive difference to every learner" (University of Auckland, 2016a, para.4). Strengthening interactions at all levels of the system is one means of fulfilling the promise of something 'better' than the current state. This indicates that 'quality' can also be conceptualised as adaptive and responsive relationships within a complex system.

Both the language of schooling and certification processes in New Zealand suggest, at least, progression through particular stages – from primary through to tertiary, and from Level 1 through to Level 10 qualifications. While this implies a linear process, the visual (Figure 2) and language regarding delivery of the *Tertiary Education Strategy* highlight how concepts of linear

progression are redundant in a complex system. Linear progressions suggest an end-point, where educational goals are complete. Completion does not accommodate the ongoing challenge of 'quality' outcomes in a dynamic international environment.

Figure 2 presents a cycle without an end-point for individuals, rather than the linear progression supposed in the language of the national qualifications structure (where Level 1 qualifications step toward Level 10 qualifications).

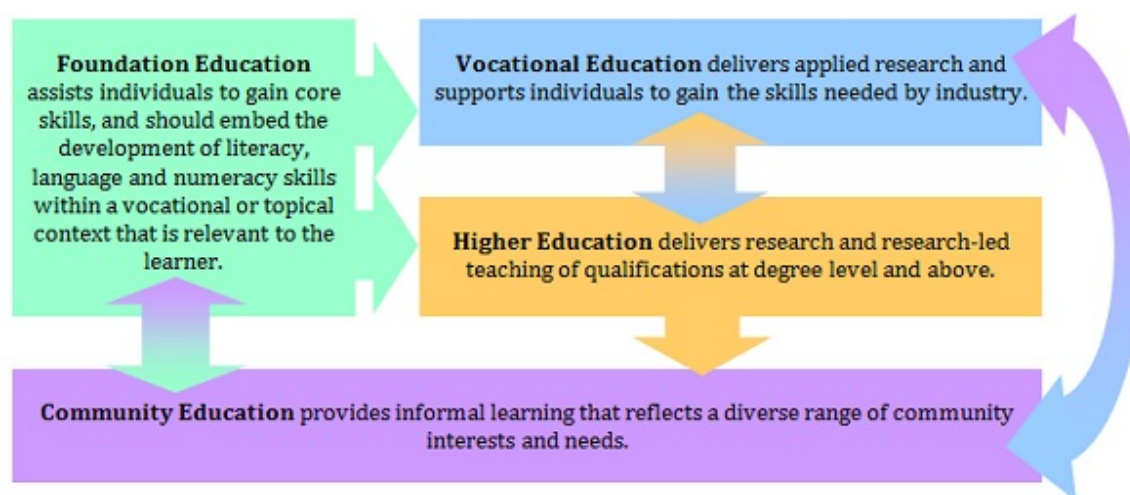


Figure 4. Delivery strategy (Ministry of Education, 2014c).

From *Tertiary education strategy 2014-2019*, by Ministry of Education, 2014 (<https://education.govt.nz/further-education/policies-and-strategies/tertiary-education-strategy/>). Reprinted under Creative Commons Attribution 3.0 New Zealand license.

Despite representing non-linear interactions, a cohesive account of the system, which includes the related purposes and functions of heterogeneous structures that engage in these interactions, is shown in Figure 2. This suggests that the system of inter-sector interaction in New Zealand is a “perspective” (Wimsatt, 1994, p.19) not requiring trans-perspectival solutions. The tertiary education delivery strategy states: “This system will be most effective when all parts are working well and there are strong relationships across and between TEOs, and with the broader education system” (Ministry of Education, 2014c, section.10, para.18). The notion of “strong relationships” (Ministry of Education, 2014c, section.10, para.18) supporting effectiveness and quality is also evident in numerous other Ministry of Education webpages, and university webpages that advocate school-university partnerships in initial teacher education.

This relationship-based focus for educational ‘quality’ is also supported on school webpages. However, schools frame it in a trans-perspectival manner. Schools regard school-home

relationships, or school-community relationships, that exist outside the “perspective” (Wimsatt, 1994, p.19) of formal education as contributing to ‘quality’. Interestingly, this trans-perspectival understanding about relationship-based ‘quality’ is also evident in other Ministry of Education webpages where sharing, collaborating, and working in partnership including with whānau, community members, and employers (Ministry of Education, 2016b) enables benefit to be derived from each other’s knowledge and expertise, so that agents within the system can “develop our collective knowledge base” (Ministry of Education, 2013, para.15) to operate effectively in complex contexts. This is strikingly apparent in the area of Targeted learner groups (refer Table 3).

In summary, despite a schooling and certification framework that appears founded on a model of linear progressions, and a single perspective solution to ‘quality’ as a knowable end-point, the current concepts of ‘quality’ and ‘effectiveness’ within the New Zealand education system are largely underpinned by concepts of systemic dynamism, continuous comparison, and responsiveness to unpredictable change on international, inter-sectoral, and interpersonal levels.

This indicates a conceptual paradox. The system predicates “sustainable changes” (Ministry of Education, 2014b p.7) and ongoing improvement toward ‘quality’ or ‘effectiveness’ on open, dynamic, processes. Concurrently, the system tends toward indicating outcomes from a less open model, entailing concepts of completion and step-by-step linear progression for educational participation and success (i.e., certification) alongside single-perspective solutions. This suggests that partnerships and collaborative practices addressing concerns of ‘quality’ and ‘effectiveness’ within the system require, at least, an awareness of this conceptual paradox.

4.5.2 Concepts of agency in the system

Narratives of systemic change are linked to concepts of participatory empowerment. Ministry of Education webpages frame ‘quality’ teachers as empowered agents within an ‘effective’ education system; teachers who work collaboratively to identify and implement localised solutions to broader systemic “puzzles of practice” (Ministry of Education, 2015a, para.5). Within the systemic improvement dialectic ‘quality’ teachers and teacher-educators are positioned as

agentic; an adaptive community of learners who bring expertise to the sector, build expertise within the sector, and share expertise across the sector.

Notions of agency and empowerment in complex situations are influenced by narratives of change. The key narratives of systemic improvement discourse in education derive from assumptions that: change is uncertain, volatile, and destabilising; change is natural; change incites hopeful struggle; and change is transformative (adapted from Clarke & Newman, 1997; Flint & Peim, 2012). In identifying difficulties with the systemic improvement change narrative, Flint and Peim (2012) highlight the necessity for agents within the system to possess resilience, self-efficacy, and problem-solving abilities.

Narratives of change and improvement in education order time in a conveniently neat chronological system of beginning, middle and end phases. By means of this retrospective gaze, many of these narratives overlook the hidden lacuna, chaos, confusion, disorder, fragmentation, discontinuity and ambiguity that many have experienced in their efforts to change particular organizations and institutions. (p.43).

The hidden experiences of change, which require negotiation of relational interactions – at sectoral, institutional, and personal levels – along with a commitment to continually seek ‘better’ responses to emerging circumstances, are not acknowledged on the webpages analysed but, in contrast, are a key feature of school-university partnership literature.

Despite omitting to explicitly acknowledge hidden experiences of change, the agentic teacher, or teacher-educator, is positioned within the system as “responsive and resilient” (Auckland University of Technology, n.d., para.3) to change. Agentic practitioners can “learn and practise concurrently” (University of Auckland, 2016b, para.10) in dynamic environments, and are equipped with the self-efficacy to problem-solve while facing a “range of new and unexpected challenges” (Massey University, n.d., para.5). Thus, ‘quality’ educators assume responsibility to manage change ‘effectively’ in a local setting, and contribute to collective management of the future uncertainties that change brings.

The Ministry of Education attempts to inculcate a sense of collective agency and systemic responsibility. This is apparent in provision of resource that allows teachers to “work together ... drawing on each other’s skills, knowledge and experience”, (Ministry of Education, 2016a, para.4) as well as providing “more opportunities for parents, families and whānau and

communities to be involved with ... young people's learning" (Ministry of Education, 2016a, para.3). What is not readily apparent is publicly accessible evidence from the university webpages analysed or school websites that agentic partnerships are central to the perceived roles or responsibility of these institutions. This is starkly illustrated by the fact that only one university identifies its partner schools, and that none of those schools identify engagement with the Ministry of Education's (2013) *Lifting the quality of initial teacher education provision* initiative.

An institution may be engaged in multiple formal partnership interactions across the sector, but at the same time may prioritise and promote specific partnership relationships as part of the institution's public identity. The schools listed as partners on the university webpage for the Master of Teaching and Learning have not prioritised or promoted their engagement with, or contribution to, 'quality' teaching in New Zealand as part of the *Lifting the quality of initial teacher education provision* initiative. Equally, as only one of the university webpages related to the *Lifting the quality of initial teacher education provision* initiative identifies partner schools, it suggests that neither university-based nor school-based parties involved in the new partnership model of initial teacher education prioritise or promote the partnership itself as central to the "innovative and exemplary" (Massey University, n.d., para.2), "future-oriented" (Auckland University of Technology, n.d., para.6), and "prestigious" (University of Otago, n.d., para.2) professional postgraduate qualifications. This is despite the partnership approach being a key feature of these new programmes (Ministry of Education, 2013).

The lack of prioritisation or promotion of the 'partnership' element of the *Lifting the quality of initial teacher education provision* initiative in school and university websites suggests that engagement in collaborative practices may not be understood by those institutions as an action that is central to their purpose, identity, or their contribution toward educational improvement in New Zealand. Yet, the Ministry of Education positions itself as providing opportunity and resource for improved agency and empowerment. This suggests that the responsibilities associated with agency and empowerment are not necessarily prioritised by institutions (even though they may be enacted in some form).

Collective agency is an essential feature of the systemic improvement narrative. The policy commitment to collective agency is highlighted in the Ministry of Education texts. The

institutions participating in this systemic commitment, while aligned with the policy framework at a superficial level, using the same language of “adaptive expertise” (Massey University, n.d., para.3) and partnership, do not indicate a deeper alignment with notions of collective agency and collective responsibility. Universities acknowledge that “New Zealand needs more teachers who are committed to making significant improvements in the learning and engagement of young learners from all backgrounds and in all circumstances” (University of Auckland, n.d., para.1) in developing postgraduate programmes aligned with the *Lifting the quality of initial teacher education provision* initiative. Yet, evidence of collective ownership and responsibility, as a social action that transforms current circumstance into the Ministry of Education’s preferred future-state ‘imaginary’, is not evident on the university webpages, nor in school websites. This implies that the goals of institutions entering into partnership may diverge from the political framework where sustainable change is effected collaboratively.

In a system where education is the promised “passport to success” (Ministry of Education, 2014c, para.4) for individuals and society – a system competing to become internationally recognised as high-performing, and where the system is continuously ‘not good enough yet’ – it is assumed that agentic collaborative interactions in multiple contexts will support ongoing systemic improvement, and lead to sustainable change. The Ministry of Education extolls collaborative partnerships as a means to initiate and sustain systemic improvement. On university and school websites there is a lack of public promotion, or prioritisation, of collective contributions to enhancing education in New Zealand through partnership. This indicates that there is a gap between the promise of what collaborative practice might achieve, and the ways that partnership is currently framed and practiced.

4.5.3 Concepts of knowledge in the system

The Ministry of Education webpages clearly indicate a concept of ‘knowledge’ that is perceived as something collective, dynamic, and related to application in context. *Centres of research excellence* (Ministry of Education, 2015b) “support the Government’s broader policy objectives for innovation ... through the creation of new knowledge, human capital development, and

knowledge transfer” (para.6). A knowledge base that is collective, national, and shared for benefit across the sector is presented.

The idea that there is not a specific fixed-knowledge that applies in every context is exemplified in the *Lifting the quality of initial teacher education provision* (Ministry of Education, 2013) initiative webpage where the Ministry of Education seeks to “find out what exemplary practice looks like” without being “prescriptive” (para.16). This page hyperlinks to additional research that discusses and informs “the potential nature of shifts in practice that could contribute to improved teaching and learning” (Ministry of Education, 2013, para.28). The low level of certainty expressed in the modal verb “could”, as well as the use of the term “potential” (Ministry of Education, 2013, para.28), indicates that the solutions to the ‘problem’ of improved teaching and learning are not fixed. Rather than being prescriptive, the Ministry of Education is open to discovering possibilities. This open approach to constructing and discovering practical knowledge – “what works” (Ministry of Education, 2015a, para.7) – is expressed with a similar low level of certainty, in other webpages where the Ministry of Education financially supports projects that “could involve applying existing teaching practices in new ways or exploring new practices to see if they can improve learning outcomes” (Ministry of Education, 2015a, para.2), or “to find ways of helping individual (or groups of) students to succeed” (Ministry of Education, 2015a, para.5). This supportive approach to contextual knowledge generation accepts that the education system is not currently achieving its goal for every New Zealander. The approach acknowledges that something new, innovative, or different may be discovered to improve the system if agents are provided opportunity and resource to generate knowledge, and practical solutions together. Policy level support for capacity building, problem-solving, innovation, research, and inquiry, suggests that systemic knowledge creation (Bereiter & Scardamalia, 2012, 2014), and judgement through human agency (Biesta et al., 2015; Gordon & Rajagopalan, 2016) are frames for knowledge held by the Ministry of Education. The importance of the idea of ‘knowledge networks’ derived from educational futures literature, and an understanding of education operating as part of a complex adaptive system is evident. In many Ministry of Education webpages ‘knowledge’ is something collectively generated to benefit the entire system.

In the university webpages analysed, knowledge is expressed primarily as something that can be “gained” (Victoria University of Wellington, n.d., para.3), or possessed, alongside skills. Knowledge is something the institutions can “equip” (University of Canterbury, n.d., para.2; University of Auckland, n.d., para.5) graduates with, or can deliver in papers (Auckland University of Technology, n.d.). The view that knowledge can be delivered to equip pre-service teachers to enter the teaching profession – a little like filling their pack before they tramp into the wilderness – seems at odds with the collective and dynamic understanding of knowledge presented in the Ministry of Education webpages.

However, the university pages do express notions that “subject knowledge” (University of Auckland, 2016b, para.1), “curriculum knowledge” (University of Auckland, n.d., para.12), and “content knowledge” (Victoria University of Wellington, n.d., para.15; University of Waikato, n.d., para.1) are necessary but not sufficient for ‘effective’ teaching. This is demonstrated with four universities identifying critical and reflective practices as important in their programmes. Some webpages note the role of mentorship in supporting critique. Critique, reflection, and evidence-based inquiry are expressed as key features of the Masters of Teaching and Learning papers. It can be assumed these are professional ‘tools’ with which to create and build knowledge collectively: essential equipment the universities provide to Masters of Teaching and Learning candidates.

In contrast, the process for accessing the available opportunity and resource from the Ministry of Education within a localised context, and subsequently for the utilisation of that resource, is less open. Universities applying to operate a programme under the *Lifting the quality of initial teacher education provision* initiative are required to address a number of essential elements “considered necessary to achieve the goal” (Ministry of Education, 2013, para.16). Teachers applying for resource under the *Teacher-led innovation fund* “must” ensure alignment with “the purpose, scope, scale, and expected benefits” (Ministry of Education, 2015a, para.8) of the fund. *Communities of learning|Kāhui Ako* set shared achievement challenges which must be endorsed by the Ministry of Education. Successful applications for any of these funds and initiatives are subject to specific conditions for monitoring and reporting. Equally, numerous Ministry of Education webpages provide strategic templates and practical tools to support schools. It is interesting to note that if the aim of an initiative is to enable the agency to ‘think

outside the box', it may be undermined by the necessity to 'tick the box' during planning, monitoring, and reporting phases.

It is acknowledged that action plans, monitoring, and reporting allow for accountability in the use of public funds. Performance-linked funding (Ministry of Education, 2014c, 2015b) enables value for money and quantifiable gains in educational outcomes. "Performance is driven by how teaching and research is delivered, who is taught, and what is taught and researched" (Ministry of Education, 2014c, section.10, para.7). The Ministry of Education webpages aimed primarily at a tertiary sector audience express a much more overt performance focus related to knowledge and learning. The webpage detailing the systems delivery expectations of the *Tertiary Education Strategy 2014-2019* uses the term "performance" fifteen times, while using the term "knowledge" once. In Ministry of Education webpages with a more overt tertiary sector audience notions about 'learning' are linked to provision, opportunity, and results. School sector focused Ministry of Education webpages link notions about 'learning' to environments, pathways, or services. Neither the university or school webpages analysed pair concepts of 'performance' and 'knowledge', or 'performance' and 'learning' together. Nevertheless, in the university webpages presenting paper outlines, and the Ministry of Education pages aimed at a primarily school-sector audience, there is evidence that planned data analysis and research-based evidence are considered prerequisite to success.

Exploratory and innovative practices are supported and resourced to generate collective knowledge within the system. Equally, these initiatives are bounded by performance measures or evidence that supports current understandings of what is beneficial. These performance measures highlight what *should*, rather than *could*, be a solution that leads toward new knowledge, and sustainable systemic change. Knowledge is conceptualised paradoxically as something that is both plastic and something that is fixed. Knowledge is something that can be developed through exploration of possibilities and generated through learning processes. Equally, knowledge is defined by necessary elements, designated under specific evidence requirements, and predetermined by performance measures. This suggests that partnerships collaborating to produce 'knowledge' within the system require some level of awareness of this conceptual paradox.

4.5.4 Concepts of localisation within the system

The theme of 'localisation' emerged from analysis of school websites. The school websites present a concept of 'localisation' which diverges from both the Ministry of Education and universities presentation of this idea in an important way.

The Ministry of Education presents the concept of localised solutions as relevant to sustainable systemic change. The universities present similar ideas to the Ministry of Education, with more of a focus on the importance of an intersection between theory and practice, and evidence-based practice being shared across the profession. This is especially apparent in university webpages containing paper outlines.

In contrast, schools present concepts of 'localisation' that have less to do with the education sector, and more to do with a specific geographic locale. While both the Ministry of Education and schools utilised the term "community" more than other search term related to partnership, the idea of 'community' presented by schools is one often bounded in their local area and underpinned by explicit concepts of active citizenship (Puhinui School, n.d.) and belonging (Papatoetoe West School, n.d.). The school community is directly linked to the immediate area, the environment in which their students reside. Local businesses advertise in school newsletters. Local events are publicised and some are held within the school facilities. Local interaction 'outside' the education sector is sought, highlighted, and managed in school published public stances on 'partnership'.

While seven schools do not explicitly articulate concepts of 'community' with other institutions in the education sector, one school has a website shared with a local secondary school. The common website stipulates their common values, ideals, and approaches to teaching and learning as part of a 'local' model (Hobsonville Point Schools, n.d.). It is of interest that while these schools are also members of a Community of learning|Kāhui Ako, there is no Community of learning|Kāhui Ako information on their publicly available website. This indicates that the concept of 'local solutions' presented by the Ministry of Education, especially related to the *Communities of learning|Kāhui Ako* (Ministry of Education, 2016a) direction, is different from how schools publicly present concepts of 'local'. This raises doubts about the Ministry of Education's implicit assumption that localised solutions within the system can serve wider

systemic purposes. It also raises the question of whether a conceptual shift is necessary for schools and the Ministry of Education to enact the systemic goals inherent in 'partnership'.

Further, while four of the eight schools whose websites were analysed are members of Ministry of Education Communities of learning|Kāhui Ako, none include any information about that specific 'community' in their publicly accessible webpages. The *Communities of learning|Kāhui Ako* (Ministry of Education, 2016a) and *Teacher-led innovation fund* (Ministry of Education, 2015a) are funded by the Ministry of Education specifically to generate 'local' solutions to systemic concerns. One systemic concern is increasing the quality and effectiveness of pathways and transitions (Ministry of Education, 2016b), alongside promoting strong relationships in the tertiary sector (Ministry of Education, 2014c). Yet, in the 180 Communities of learning|Kāhui Ako throughout New Zealand, which involve collectively supporting the success of 495,000 young people, there are only three post-secondary sector providers involved (Ministry of Education, 2016a). These providers are all Private Training Establishments, even though the Ministry of Education publicly encourages post-secondary providers, employers, and community members to join a Community of learning|Kāhui Ako (Ministry of Education, 2016b).

This suggests the concept of 'localisation' is framed by schools geographically, framed by universities professionally, and framed by the Ministry of Education systemically. These different schema may impact how agents within the system conceptualise the boundaries which implicitly structure their capacity to take advantage of, and act on, opportunities provided within the 'local community'. Equally, possessing different schema may impact how agents within the system conceptualise the purpose of 'partnership'.

4.5.5 Concepts of engagement within the system

The theme of 'engagement' emerged from analysis of school websites. The school websites present a concept of 'engagement' that is predominantly related to parents, whānau and the local community. The school websites encourage engagement with the school, through interaction with the teachers, the classes, and the physical location of the school. This engagement is intended to be achieved through various face-to-face and online communication processes, in which the parents, whānau, and community are invited to participate. Schools

desire engagement from parents and whānau in the processes of educating students (e.g., requests to attend parent conferences), and from the community in the development of the school (e.g., suggesting ways to participate in fund-raising activities). This has a foundation in the neoliberal decentralisation agenda of *Tomorrow's Schools*, which encouraged 'partnership' as a means to achieve a locally effective solution to education, with Boards of Trustees representing the community who set their own goals and educational agenda in a particular geographical context. The school's engagement with parents, whānau, and community is desirable to promote opportunities for students, but understood to be a choice on behalf of parents, whānau, and community that needs to be encouraged and supported with words such as 'please', 'request', 'volunteer', 'appreciate', and 'thank' being common.

In one *Community of learning|Kāhui Ako* (Ministry of Education, 2016b) webpage the Ministry of Education does utilise an approach akin to schools, inviting tertiary provider engagement: "you are encouraged to join" (para.3). The Ministry of Education makes it clear that tertiary provider engagement is "voluntary" (Ministry of Education, 2016b, para.3) and that the tertiary provider's role is to "support", or "proactively support", "the achievement challenges of ... Communities of learning|Kāhui Ako in your area" (Ministry of Education, 2016b, para.3-6). The encouragement from the Ministry of Education is contingent, and belies the Ministry of Education's system-wide approach to collaborative practice. In the Ministry of Education's encouragement of engagement, tertiary institutions are positioned as subsidiary to Communities of learning|Kāhui Ako. Communities of learning|Kāhui Ako define their goals, and tertiary institutions support those established goals rather than actively participate in shaping the community.

In most cases the presentation of ideas of 'engagement' in the Ministry of Education texts is deontic. It is an expectation that stakeholders ought to engage. More than offering the shared opportunity that schools present, the deontic modality from the Ministry of Education communicates a responsibility to engage. The universities present a concept of 'engagement' that aligns with the Ministry of Education. The university webpages suggest engagement is essential to the collective capacity of the profession.

The relationship between ideas of 'engagement' and 'agency' is raised in these different expressions of choice and responsibility. Similar ideas about this relationship were raised in Chapter 2. The ability to notice the responsibilities associated with agency may be limited if

engagement is a choice, rather than a commitment. This difference in how engagement is understood further indicates a gap between the promise of what partnership and collaborative practice might achieve, and the way that partnership is currently framed across the system.

4.5.6 Summary findings of the conceptual analysis

The five concepts in the discourse related to school-university partnerships provide insight into the relationships between elements of the system and the underlying schema, to explain how 'partnership' might be currently understood.

The conceptual analysis suggests that there are underlying paradoxes presented in concepts of 'systemic quality' and 'knowledge'. This relates to the 'effectiveness' of the system. The dual processes of predictable linear progression, and unpredictable complex system dynamics underpin the paradox related to 'systemic quality' and 'effectiveness'. Similarly, the concept of 'knowledge' hinges on the idea of something that exists in a state of dynamic flux but, concurrently, remains fixed.

The analysis also suggests there is a gap between the promise of what collaborative practice might achieve and the way that partnership is currently framed – especially in the relationship between ideas of 'agency', 'engagement', 'accountability', and 'empowerment'. There is a tension between how provision of opportunity could be understood as an obligation to act when the Ministry of Education uses a deontic modality. The conceptual space between choice and commitment becomes blurred in both the university and Ministry of Education published public stances about partnership. Such obtuseness does not concur with school published public stances about partnership, that use an invitational tone to request engagement.

One of the conditions necessary for partnership to fulfil its purpose/s in New Zealand education is presented by the Ministry of Education as a collective responsibility for systemic improvement (in terms of quality, effectiveness, responsiveness, adaptability, and sustainable change). This is thought to be achieved by providing opportunity, resource, and guidance (including monitoring, and reporting strategies) for improved collaborative practice. Collective responsibility for systemic improvement connects to the positioning (noted in Chapter 2) of

school leaders, as well as schools (or Communities of learning|Kāhui Ako) as *more* responsible for progressing government educational priorities than universities.

One of the conditions necessary for partnership to fulfil its purpose/s in New Zealand education is presented by universities involved in the *Lifting the quality of initial teacher education provision* initiative as a professional responsibility for learning together (in terms of awareness, knowledge, and evidence of 'what works'). This is thought to be achieved by provision of the professional knowledge, skills, and 'tools' for improved collaboration at the intersection of theory and practice. Universities appear to support the positioning of teachers (noted in Chapter 2) as a connected community of learners.

One of the conditions necessary for partnership to fulfil its purpose/s in New Zealand education is presented by schools as active engagement with parents, whānau, and the local community. This is thought to be achieved by supporting and encouraging open communication processes that promote participation and contribution within a local community. The promotion of citizenship and belonging is not specifically addressed in the literature, but there is a connection to the notion that the "human story behind partnerships is about a set of personal commitments that make partnerships viable" (Gardner, 2011, p.80).

This indicates that while institutions are seeking to progress partnership aims, they currently 'think' partnership differently. Table 8 indicates these different purposes of partnership, the problems partnership is intended to resolve, and the existing assumptions about partnership expressed in the conceptual analysis.

Table 8. *Summary of purposes, problems, and assumptions about partnership*

Stated and unstated purposes that partnership is serving	Stated and unstated problems that partnership is anticipated to resolve	Assumptions expressed about 'partnership' across the system
systemic improvement in quality and effectiveness	inconsistent quality and effectiveness across the system	'quality' and 'effectiveness' are emergent properties – arising from continuous, dynamic, and responsive processes that occur at international, inter-sectoral, and interpersonal levels of the system
improved systemic responsiveness and adaptability	limited systemic responsiveness and adaptability	'quality' and 'effectiveness' can be measured by international ranking, meeting performance targets, and evidence-based inquiry
sustainable responses to systemic change	isolation (of positive change, knowledge, and evidence of 'what works' in education)	agentic collaborative interactions in multiple contexts will support ongoing systemic improvement and sustainable change
collective knowledge generation	isolation (of educational institutions and practices from community)	agents within the system possess skills and motivation to take advantage of, and act on, opportunities provided
wider evidence of 'what works' in education	lack of collective responsibility for education	agents external to the system need to be provided opportunities and invited (or encouraged) to participate
shared professional awareness of 'what works' in education		knowledge is collectively generated - agents need to be equipped with the critical 'tools' for knowledge-building
promote active citizenship		knowledge generation can be measured by meeting systemic performance targets, and evidence-based inquiry
promote 'belonging'		'locally' framed identity and purpose is not necessarily connected to systemic improvement
promote wider engagement with education		engagement is a responsibility to be expected
instigate collective responsibility for education		engagement is a choice to be encouraged

Taking the stated and unstated purposes of partnership (in Table 8) and using a process of retroduction, four key purposes for school-university partnerships existing in the New Zealand education system are proposed (in Table 9). Each purpose can be understood as a framework for understanding. Each framework presents challenges that shape how agency, knowledge, and identity can be understood. Table 9 provides an overview of each framework's key

challenges, the overarching purpose of agency, the overarching purpose of knowledge, and identity concepts that align with those purposes.

Table 9. Overview of frameworks for understanding the purposes and challenges of partnership

Purpose for school-university partnership	Key challenge/s	Purpose of agency	Purpose of knowledge	Useful identity concepts for these purposes
<i>Promote quality</i> <ul style="list-style-type: none"> • systemic improvement in quality and effectiveness • instigate collective responsibility for education 	Quality and effectiveness	Share expertise	Improvement (systemic quality)	Reflective learner Active member of a learning collective Agent in a broader system
<i>Promote innovation</i> <ul style="list-style-type: none"> • improved systemic responsiveness and adaptability • sustainable responses to systemic change • collective knowledge generation 	Unpredictability of change	Collaborative knowledge generation	Innovation or exaptation for emergent conditions	Responsive/ agentic 'node' in systemic 'network' interactions
<i>Promote professional growth</i> <ul style="list-style-type: none"> • wider evidence of 'what works' in education • shared professional awareness of 'what works' in education • instigate collective responsibility for education 	Sustaining professional learning	Collectively learn to learn, and practice, together	Broaden collective professional perspectives and practices Contribute to sustainable professional learning in a changing environment	Reflective learner Active member of a learning collective Agent in a broader system
<i>Promote participation</i> <ul style="list-style-type: none"> • active citizenship • belonging • wider engagement with education 	Active engagement	Participatory empowerment	Broaden collective perspectives and practices Contribute to collective perspectives and practices	Active member of a community

4.6 Lenses and frames to understand 'partnership'

The following section summarises the research findings obtained from a critical realist theorising method. It then offers a theorisation of the generative mechanisms shaping understandings of partnership. It explains the unique properties and attributes of 'partnership' and the necessary and contingent elements of 'partnership'.

It goes on to examine how the existing tensions and paradoxes of 'partnership' ideas can be theorised from two interconnected, but distinct, frameworks for understanding. It identifies a framework for explaining the cause of those tensions and paradoxes.

4.6.1 Theorising 'partnership'

Utilising critical realist interrogative approaches, adapted from Sayer (2000), this section suggests a theorisation of 'partnership' in New Zealand education. The focus is on the conceptual frames which enable 'partnership' to be understood and explained.

The intended activities of partnership include: problem-solving, sharing expertise, collaborating, learning together, generating knowledge, sharing responsibility, adapting responsively, and innovating. Some of these activities can be achieved in isolation, so it is not necessary to form a partnership to undertake the intended activity. Thus, the primary causative explanation is that a shared need prompts the entity of partnership to become activated.

The research questions were constructed to suggest that partnership serves a purpose and that this purpose is inherently intended to resolve a problem, issue, or conflict. This assumes that 'partnership' (as an entity) exists to fulfil a need that neither constituent part can fulfil on its own. While this assumption may be incorrect, it is drawn from one theme in Chapter 2 about 'what works' in partnership – mutuality and reciprocity. The notion of interdependence is a key precondition for 'partnership'. As an entity, 'partnership' presupposes that there are interdependent constituent parts, with each part reliant (to some extent) on another part to fulfil a shared need. For partnership to exist it requires: the existence of a mutually understood shared need; the incapacity of an agent (e.g., institution) to meet that need by acting alone; and a recognition that acting together can result in reciprocal benefit.

Partnership in education is intended to fulfil varied needs. The Ministry of Education expresses a need in terms of striving for collective values of national prosperity, equity and fairness, self-realisation, and participation to be more fully realised. Universities, in the context of school-university partnerships incentivised under the Government's *Lifting the quality of initial teacher education provision* initiative, express how the nation and profession needs more quality teachers who are reflective practitioners, able to adapt to changing contexts, and contribute to professional knowledge. Schools express a need to be connected to parents, whānau, and the local community for the benefit of both their students and their wider community.

The extent to which each of these expressed institutional needs are shared, and the capacity of 'partnership' to fulfil those needs, was indicated in the data analysis. The Ministry of Education's need to address an implied current systemic 'problem' with a lack of 'quality' is shared by universities engaged in the incentivised postgraduate programmes designed to address the identified need. The data suggests that the overarching Ministry of Education need is shared in a superficial manner by universities engaged in those school-university partnerships. The school websites do not explicitly express a shared need to address concerns of systemic 'quality' with either the Ministry of Education, or the universities. Schools do express a need to engage locally outside the education sector, in a "trans-perspectival" (Wimsatt, 1994, p.19) manner, but evidence of that need being shared by the local community was limited to publication of events and advertising in school newsletters. The data suggests that Ministry of Education partnership aims are not a priority in either schools or universities. This aligns with what was suggested in Chapter 2, that school-university partnerships are not core business for either schools or universities.

The data suggests that the pre-condition of a shared need can be both imposed structurally – *Lifting the quality of initial teacher education provision, Communities of learning|Kāhui Ako, Centres of research excellence* – or can emerge organically. Two schools sharing one website to publish a common stance about values, ideals, and approaches to teaching and learning is evidence of this organic emergence. Similarly, two universities sharing a postgraduate initial teacher education programme is evidence of this organic emergence. The data also indicates a complicating factor is an interplay between the structural imposition of need, and organic growth of shared need. This is particularly apparent in the alignment of funding processes with

structurally imposed needs, and therefore structurally imposed goals. The ability of schools or universities to direct resources toward shared needs that have organically arisen may be affected by the Ministry of Education funding processes, or by their own internal institutional resourcing mechanisms.

In order for partnership to exist, the shared need and the mutual benefit must be explicitly understood by the institutions involved. This mutual understanding allows for negotiation of institutional time, resource, and commitment, which were highlighted as dynamic features of partnership in Chapter 2. The data suggests the Ministry of Education does not seek to prescribe the utilisation of institutional time, resource, or commitments, allowing for localised collaboration and exploration of possibilities (Ministry of Education, 2013, 2015a). The conditions of an explicitly understood shared need, and identified mutual benefit between institutional partners, along with some level of adaptability to dynamic circumstance may enable partnership to exist between institutions.

These conditions presuppose an inherent dynamism within the system. A capacity to 'cope' with the dynamism of a situation is most likely relevant for partnership because the dynamic challenges suggested in the data include: adaptability to an unknown future; flexible contextualisation of skills and knowledge; managing change; efficient resource utilisation; promotion of quality and consistency. This suggests that closed or fixed institutional systems are less likely to sustain a partnership through the "challenges [that] continually emerge" (Walsh & Backe, 2013, p.602).

The concept of 'partnership' entails movement from an undesirable situation toward a more desirable situation in an interdependent relationship with another. The movement from an undesirable situation toward a more desirable situation cannot be achieved independently, so the situational interdependence is explicit to those entering a state of partnership. Situational interdependence suggests that there is something unique about 'partnership', as an entity, that enables action toward fulfilment of those situational needs. Table 10 shows how I adapted Sayer (2000) to consider: 'What is unique about partnership that makes it able to fulfil needs?'

Table 10. *Unique attributes of the partnership entity*

Key actions intended to fulfil shared needs	What might enable this action to occur?	What is unique about partnership that might enable this action to occur?
problem-solve <i>can be achieved in isolation or by working alone</i>	<ul style="list-style-type: none"> identified problem commitment to solution/s negotiation of time and resource 	<ul style="list-style-type: none"> pooling resources leverage diversity (of perspectives, approaches, skills, and/or knowledge) collective commitment
share expertise	<ul style="list-style-type: none"> possession of expertise application of expertise to context desire to contribute capacity to notice/hear alternatives 	<ul style="list-style-type: none"> formal context (and/or structures, and/or processes) for bringing experts together
collaborate	<ul style="list-style-type: none"> individual commitment to address need/s and/or find solution/s capability to contribute unique perspective/s capacity to notice/hear alternatives relational trust collective ability to openly address conflict 	<ul style="list-style-type: none"> formal context (and/or structures, and/or processes) for collaborative practice
learn together	<ul style="list-style-type: none"> individual orientation toward learning (e.g., reflective) access to resources/time relational trust collective ability to prompt cognitive dissonance collective ability to address cognitive dissonance 	<ul style="list-style-type: none"> formal context (and/or structures, and/or processes) for learning multiple 'sites' for action multiple 'sites' for feedback
generate knowledge <i>can be achieved in isolation or by working alone</i>	<ul style="list-style-type: none"> access to current 'knowledge' identified 'knowledge gap' resources and time capacity to notice alternatives (creativity) orientation toward learning (e.g., reflective) 	<ul style="list-style-type: none"> pooling resources leverage diversity (of perspectives, approaches, skills, and/or knowledge) collective commitment
share responsibility	<ul style="list-style-type: none"> individual commitment to address need/s and/or find solution/s awareness of and access to resources and time awareness of individual and team accountabilities relational trust 	<ul style="list-style-type: none"> formal context (and/or structures, and/or processes) for collective commitment
adapt responsively <i>can be achieved in isolation or by working alone</i>	<ul style="list-style-type: none"> awareness of current 'knowledge' and 'practice' capacity to notice alternatives (creativity) capability to action alternatives (risk-taking) orientation toward learning (e.g., reflective) 	<ul style="list-style-type: none"> leverage diversity (of perspectives, approaches, skills and/or knowledge) multiple 'sites' for action multiple 'sites' for feedback

<p>innovate</p> <p><i>can be achieved in isolation or by working alone</i></p>	<ul style="list-style-type: none"> • awareness of current practice • identified 'practice gap' • commitment to innovate/change practice • negotiation of time and resource • capacity to notice alternatives (creativity) • capability to action alternatives (risk-taking) 	<ul style="list-style-type: none"> • pooling resources • leverage diversity (of perspectives, approaches, skills and/or knowledge) • collective commitment • multiple 'sites' for action • multiple 'sites' for feedback
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Partnership occurs in a dynamic reality. The need to 'cope' with change, to learn to adapt to new or different situations, is central to partnership activation. The necessary conditions for partnership to exist include: a shared need, an explicit reciprocity, and situational interdependence. The unique attributes of partnership, which cannot be achieved by either partner alone, include that partnership enables:

- formal contexts, structures, processes for 'working with' each other across institutional boundaries (for sharing, collaborating, learning, and generating knowledge)
- pooling of institutional resources (including information, expertise, and time)
- leveraging of diversity (of perspectives, approaches, skills, and/or knowledge)
- collective commitments that may prompt motivation, peer accountability, and shared responsibility
- multiple 'sites' for action and for feedback that may prompt responsiveness, adaptability, and innovation

Recognising there may be different generative mechanisms operating simultaneously to activate the unique possibilities partnership enables, it was important to seek to distinguish the effect of each. The contingencies – that is elements that could impact how partnership phenomena are activated, experienced, or noticed, in the domains of the actual and the empirical – included:

- the 'right mix' of partnership participants

A diverse mix of perspectives, skills, and knowledge will affect partnership capacities to problem-solve, share expertise, and generate knowledge. Participants who tolerate or work to overcome differences support processes of complexity reduction, thus minimising possibilities for adaptive responsiveness to unexpected change. Participants who can leverage the power of diversity, negotiate multiple factors, and 'think' systemically, would be a good 'fit' for this mix.

- contextual awareness

Application of structures, processes (and resource commitments) that are relevant to the identified partnership need and context will affect partnership capacities to collaborate, share responsibility, and adapt responsively. Partnership needs may dynamically focus on exchange (knowledge-transfer or resource-transfer), noticing and actioning alternatives, or collective learning. Formal and informal supports for 'interdependence' may or may not be evident in partner institutions.

- learning agenda

The position of learning in the partnership agenda will affect the capacity to respond to feedbacks, learn collectively, and generate knowledge. Intentional collaborative practice may prompt responsiveness, adaptability, and innovation through real-time awareness of possibilities and potentialities. Partnership learning may dynamically focus on efficient resource utilisation, informed risk-taking (and feedbacks or reflections), or capacity building.

Consistent with Wimsatt's (1994) "causal-thickets" (p.5) there is an interlacing of the contingencies affecting how partnership phenomena may be activated, experienced, or noticed, in the domains of the actual and the empirical. For instance, is the tension noted between engagement and responsibility caused by: participants who cannot negotiate their own roles and responsibilities; a lack of effective leadership structures within the partnership; an inability to respond to feedbacks from the participants? Any causal explanatory theory for partnership, addressing the tensions highlighted in the data analysis, must account for how "accountability and empowerment" (Segedin, 2011, p.55) simultaneously exist in partnership.

4.6.2 Accounting for partnership tensions and paradoxes

Within a complexity theory schema, due to the inherent dynamics of a system constantly in flux, both 'accountability' and 'empowerment' could be emergent properties of the system. Complexity theory provides an ontologically consistent causal explanation for the generative mechanisms of partnership: a shared need, an explicit reciprocity, and situational interdependence. It accounts for the systemic dynamism and the underlying need to learn how to 'cope' with change. A complexity theory framework for understanding partnership can explain the tensions in the relationship between ideas of 'agency', 'engagement', 'accountability', and 'empowerment' evident in the system.

However, complexity theory does not effectively explain the paradox evident in how the ideas of 'systemic quality', 'effectiveness', and 'knowledge' are presented by across the system. Within a complexity theory framework for understanding, order is an emergent and dynamic process. 'Systemic quality' or 'effectiveness' cannot result from a predetermined, step-by-step, linear process. Equally, an entity (such as 'knowledge') cannot be concurrently fixed and plastic.

Systemic improvement shares an ontological schema with complexity theory. Within the framework of systemic improvement, reality is dynamic and order is emergent. This could explain the essentially comparative nature of 'quality', as this idea is measured and addressed in relation to multiple, and unpredictable, causal factors. Similarly, this ontological schema could explain the ongoing tension between ideas of 'agency', 'engagement', 'accountability', and 'empowerment' that are in a dynamic relationship to one another within the system and may emerge simultaneously.

An inconsistency within the systemic improvement schema's ontological and epistemological constructs can account for more than the comparative nature of 'quality'. It can *also* account for the underlying paradox in concepts of 'systemic quality', 'effectiveness', and 'knowledge' apparent in the system. Epistemologically, the 'evidence-based inquiry' ways of knowing within the systemic improvement framework are a response to a situation with unknowable causality, as if it were a situation with causality that can be understood through expert analysis. The data-driven approach employed in systemic improvement takes "whatever data we have and create[s] a causal story" (Garvey Berger & Johnston, 2015, p.37) while, inconsistently, remaining underpinned by an ontological reality that is inherently dynamic and non-linear.

The systemic improvement framework for understanding collaborative practices in education draws upon evidence – that has been deemed "necessary" (Ministry of Education, 2013, para.16) – for monitoring improvement, analyses measures of success, creates retrospective coherence, and applies further constraints to better ensure repeatability and spread 'what works'. At the same time, the ontological positioning of the systemic improvement schema promotes probing possibilities – "exploring new ways" (Ministry of Education, 2015a, para.2) – and responsiveness to emergent trends. This is a discrepancy between ontological and epistemological constructs and explains why 'systemic quality' (and 'effectiveness') are concurrently presented as unpredictable and predictable, and why 'knowledge' is concurrently presented as dynamic and fixed.

Thus, the tensions and paradoxes of 'partnership' can be explained by a schema that has an ontological discrepancy – a framework for making sense of the world in a way that is inconsistent with its own ontological constructs. What is important (when using retroductive critical realist theorising methods) is seeking an explanatory theory that can account for the

cause of this discrepancy. Such a theory may support more comprehensive ways of sense-making around 'partnership'.

A model from the field of organisational management, Snowden's *Cynefin Framework* (2014b) shown in Figure 5, can illuminate the inconsistency within the systemic improvement schema and provides a possibility for more comprehensive ways of sense-making. This model assumes that reality is dynamic and complex, but at the same time, allows for reality to be interpreted in less complex ways (a step that the schema of systemic improvement makes implicitly rather than explicitly). This framework may provide a more comprehensive explanation for how thinking about partnership in the New Zealand education system is expressed.

The *Cynefin Framework* (Snowden, 2014b) is a model for making sense in dynamic situations. Each area (domain) represents a unique way of interpreting the present. Each domain includes an epistemological process, a means of sense-making, that corresponds to the unique interpretation of reality in that domain (Snowden, 2015).

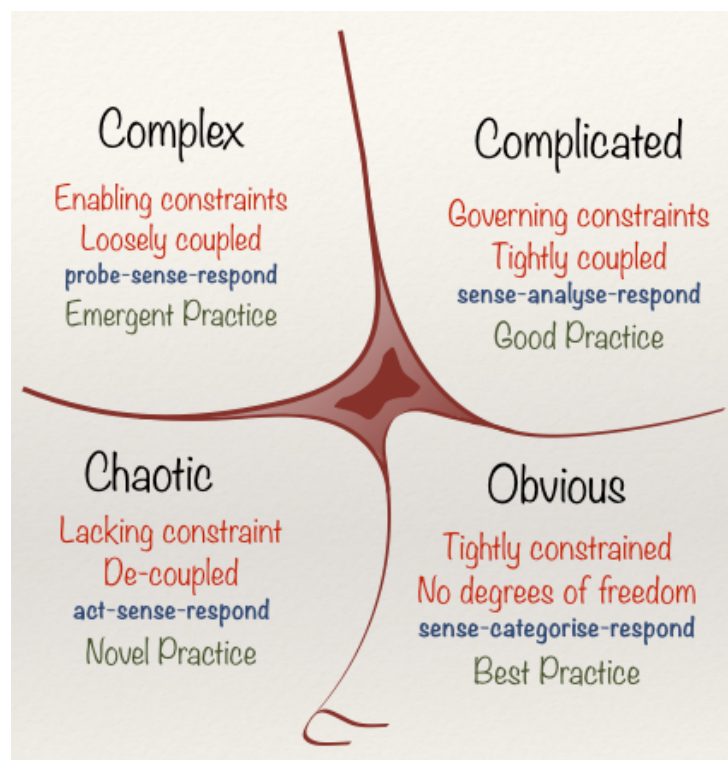


Figure 5. *Cynefin Framework* for sense-making (Snowden, 2014b).

From *Cynefin_as_of_1st_June_2014.png*, by D. Snowden, 2014 (https://commons.wikimedia.org/wiki/File:Cynefin_as_of_1st_June_2014.png). Reprinted under Creative Commons Attribution-Share Alike 3.0 Unported license.

The *Complex* domain can be aligned with a consistent ontological and epistemological schema of complexity theory. Interpreting reality as complex requires sense-making processes that allow for inherent unpredictability. Sense-making in the *Complex* domain requires a process characterised by probing the possibilities, broad evidence-gathering, and a small response that enables further probing of the present (Snowden, 2007). The dynamic of making sense in the *Complex* domain is agile; responsive to what is happening in the present, and aware of outliers in the system that could be leveraged for potential movement toward a goal (Snowden, 2015).

The *Complicated* domain can be aligned with the epistemological schema of systemic improvement. Sense-making in the *Complicated* domain is epistemologically similar to the systemic improvement schema, it includes a process of strategic evidence-gathering, analysis, and planned response. The dynamic of making sense in the *Complicated* domain is slower than in the *Complex* domain, it is analytical and seeks to “create repeatable outcomes by increasing the constraints” (Snowden, 2015, para.4). Increased constraints reduce complexity, and support consistency.

The notion of ‘consistency’ contributes to how ideas of ‘systemic quality’ and ‘effectiveness’ are imagined within the current education system. If, in the systemic improvement schema, how we can ‘know’ is dominated by processes that reduce complexity and seek repeatability, then ideas of ‘knowledge’ in that domain are predominantly fixed. The question that drives action in the *Complicated* domain is: ‘What do we know?’ In contrast, in the *Complex* domain ‘knowledge’ is dynamic, and the question driving action is: ‘How might we know?’

Both systems complexity and systemic improvement schema offer a means to explain the phenomena of ‘partnership’ as it is currently understood in different New Zealand educational contexts. Ontologically, each schema can account for the generative mechanisms of partnership as an entity, the preconditions of dynamism, and a need to learn to ‘cope’. These frameworks provide causative explanation for some of the tensions and paradoxes evident in the data. Using Snowden’s *Cynefin Framework* (2014b) for sense-making can account for the ontological discrepancy in the systemic improvement schema, highlighting that epistemological processes are mismatched with the ontological constructs. This framework offers an explanation for how the identified tensions and paradoxes underlying current institutional

'thinking' about partnership might occur. This suggests, that to 'think' partnership 'better' there may be a pre-condition for schema that allow for epistemological diversity.

4.7 Summary of findings

The ultimate aim of this research is to make explicit how institutions (the Ministry of Education, universities, and schools) currently 'think' partnership, and to identify conditions that may contribute to 'thinking' partnership 'better'.

This section directly addresses the research question and sub-questions, summarising the implicit assumptions and key concepts influencing how school-university partnerships are currently framed by institutions in New Zealand.

4.7.1 What are the implicit assumptions and conceptual frameworks expressed in discourse around school-university partnerships?

This study found that the Ministry of Education, universities, and schools in New Zealand express different, but overlapping, understandings about partnership and collaborative practice in education.

A common implicit assumption expressed in public webpages by these institutions is that collaborative practices are 'good'. This 'good' is expressed in relation to nationwide educational goals, teacher professional learning, and community engagement promoting active citizenship. An underlying concept is that working together will provide greater opportunities to share expertise, and build common understandings, toward enhancing education or citizenship.

The Ministry of Education frames thinking about school-university partnership from a "perspective" (Wimsatt, 1994, p.19) that assumes the world is changing quickly, and collaboration is a means to adapt to uncertain futures. The Ministry of Education's perspective provides a cohesive account of the system, which includes the related purposes and functions of heterogeneous structures engaging in interactions. This perspective presents a solution to an inferred 'problem' that can be resolved within the bounds of that perspective. This supports an understanding that 'quality' and 'effective' education in New Zealand requires strong interactions

of heterogeneous elements between, across, and within the broader system, utilising collective or collaborative action.

The schema applied by the Ministry of Education when presenting and expressing ideas about partnership is predominantly one of systemic improvement. The systemic improvement narrative draws from the Global Education Reform Movement measures of success (Sahlberg, n.d.). These success measures support a neoliberal political agenda. There is a disjoint in the ontology of the systemic improvement narrative because it concurrently supports linear progression toward pre-determined improvement goals within a non-linear, dynamic system operating according to complexity theory principles. Complexity theory principles include the notions of inherently unpredictable futures and order that is an emergent property. This amounts to a paradoxical positioning of: 'No-one can know for sure, but we're certain this is essential'.

Universities frame thinking about school-university partnership from a perspective that assumes the profession need to strengthen expertise to be, and remain, 'effective' in times of change and uncertainty. An assumption that the country needs more committed teachers to enable the success of all young people in every context aligns with the Ministry of Education position that professional learning and collaboration is a means for the teaching profession to increase 'systemic quality' and 'effectiveness'. According to universities engaged in partnership, the adaptive expertise (Auckland University of Technology, n.d.; University of Auckland, 2016a; Massey University, n.d.; Ministry of Education, 2013) regarded as essential to '21st century' education, can be acquired through engagement in contexts which support evidence-based inquiry, research, and learning with other experienced professionals.

Universities also present and express ideas about school-university partnership from a schema of systemic improvement, but have a professional rather than a national improvement focus. The professional focus on "responsive and resilient" (Auckland University of Technology, n.d., para.3) teachers who can "learn and practise concurrently" (University of Auckland, 2016b, para.10) and have the self-efficacy to problem-solve a "range of new and unexpected challenges" (Massey University, n.d., para.5) suggests that universities also operate from an ontology based on complexity theory dynamics. However, universities also claim to deliver knowledge to equip initial teacher education candidates with professional expertise. This

indicates that universities present the same ontologically flawed position as the Ministry of Education, and suggests these institutions conceptualise partnership similarly.

In contrast, schools do not explicitly express concepts about school-university partnership. Schools frame thinking about partnership quite differently. The implicit purposes of partnership expressed by schools are to promote active citizenship and a sense of belonging. Schools utilise an invitational tone in relation to partnership interactions, implying that partnership is a voluntary engagement on behalf of the wider community. The schools present partnership as something to be forged with their communities. These communities appear to be framed as 'outside' education system. The schema employed by schools to conceptualise collaborative practice is not necessarily derived from a shared need to systemically improve education, but rather from a desire to support an active presence as part of a geographic community.

Arising from these overlapping frameworks for understanding are implicit assumptions about partnership participants. Agents within the system are assumed to possess the skills and motivation to take advantage of, and act on, opportunities provided. This assumption is not shared by schools who invite, or encourage, agents outside the education system to participate in partnership if they have something to offer. The result of these assumptions about participant agency is that engagement is conceived as *both* a responsibility to be expected, and a choice to be encouraged.

4.7.2 What stated and unstated purpose/s does partnership currently serve in New Zealand education (and what problem/s is partnership anticipated to re/solve)?

The stated purposes that partnership serves in New Zealand education are to share expertise and work together to 'future-proof' the education system. The aim of becoming a high-performing education system is supported through engaging in collaborative practice. The Ministry of Education has several 'partnership approach' initiatives intended to fulfil this purpose; *Communities of learning|Kāhui Ako*, *Teacher-led innovation fund*, *Lifting the quality of initial teacher education provision*, and *Centres of research excellence*. The Ministry of Education also, more broadly, advocates for collaboration across the education sector to fulfil this purpose. The mandate for partnership is to support sustainable responses to change,

inculcate collective responsibility for educational outcomes, and contribute to a more prosperous society.

Universities engaged in the *Lifting the quality of initial teacher education provision* initiative aim to produce resilient and reflective teachers who can adapt to unforeseen change and meet the needs of every learner. A 'clinical practice' model that supports professional knowledge generation at the intersection of theory and practice has been adopted. The aims of partnership are collective knowledge generation, development of wider evidence of 'what works', and to share professional awareness of 'what works' in education.

Schools engaged with the *Lifting the quality of initial teacher education provision* initiative do not state the purpose of their initial teacher education partnership publicly. The purpose of partnership, as understood by schools, is to foster notions of citizenship and belonging within a local context. The aim of partnership is to prompt wider community engagement with education.

With the broad aim of becoming a high-performing and efficient education system, problems that partnership is intended to resolve include: inconsistent quality and effectiveness (including efficiency) across the system; limited systemic responsiveness and adaptability; isolation (of institutions, knowledge, and evidence of practice that 'works' in education); and lack of collective responsibility for education. An unstated purpose of partnership is to increase agency and capacity among agents within the system to learn to 'cope' together in contexts of volatile, uncertain, complex, and ambiguous futures.

4.7.3 How are concepts around partnership currently presented and expressed in New Zealand education?

This study considered concepts related to 'partnership' that were presented as part of publicly published stances on partnership and collaborative practice. The key findings were that ideas of 'systemic quality', 'knowledge', and 'effectiveness' were underpinned by an ontological discrepancy in the systemic improvement narrative. The mismatched ontological and epistemological constructs of the systemic improvement schema can account for paradoxical expressions of 'quality', 'knowledge', and 'effectiveness'. Thus, these concepts are conceived

as fixed, with an end-point that can be reached, measured, and achieved. Concurrently, these concepts were expressed as amorphous, dynamic, being generated, and in a state of flux.

This study also found that there is tension between how concepts of 'agency', 'empowerment', 'accountability' and 'responsibility' are expressed. The study found that these tensions may be the result of an inherently dynamic ontology, of a system constantly in flux, where 'agency', 'empowerment', 'accountability' and 'responsibility' are potential properties that can emerge simultaneously.

The expression of 'agency' was interesting. Schools stand out in their approach to increase agency by using language that is invitational and encouraging. The Ministry of Education adopts a deontic modality. The deontic modality assumes agents ought to act to fulfil an implied 'need'. The Ministry of Education's deontic modality may serve wider social purposes to inculcate collective responsibility for democratic educational outcomes.

4.7.4 What stated and unstated conditions are necessary for partnership to fulfil its purpose/s in New Zealand education?

The stated conditions necessary for partnership to fulfil its purpose in New Zealand education include providing opportunity for agentic action at a local and systemic level. This opportunity is available through numerous initiatives – *Communities of learning|Kāhui Ako*, *Teacher-led innovation fund*, *Lifting the quality of initial teacher education provision*, and *Centres of research excellence*. These initiatives provide resources, knowledge, and guidance (including identified performance measures). Within schools, the conditions for partnership include encouragement and invitation to participate.

An unstated condition for partnership to fulfil its purpose includes an orientation of partner institutions toward learning together, especially learning to cope with unpredictable change. This links to another unstated condition for partnership to fulfil its purpose. The other unstated condition includes willing participants who can negotiate complex and dynamic identity concepts – identities that are agentic, active, responsive, and reflective within a local community and as a much broader learning collective.

This unstated condition related to participants who can navigate identities seems to require 'professionals' (e.g., teachers or school leaders) within the education system to understand their role as a 'network' who take collective responsibility for enhancing New Zealand education, and work together with 'community' (e.g., employers, whānau) toward this aim.

This unstated condition related to participants who can navigate identities seems to require a 'community' (participants existing outside the education system) with some commitment to democratic principles in which every New Zealander "is strong in their national and cultural identity", "aspires for themselves and their children to achieve more" and "is an active participant and citizen in creating a strong civil society" (Ministry of Education, 2015c).

There appears to be an assumption that providing opportunity for agentic action at a local and systemic level will create the necessary conditions for partner institutions to orient themselves toward learning together and for participants to negotiate identity concepts. This assumption may rest upon a pre-condition of a meaning-making schema that allows for epistemological diversity.

CHAPTER FIVE: DISCUSSION

5.1 Overview

This chapter explores the relevance of what has been learnt from the study. The discussion broadly considers ways of 'thinking' partnership.

First, it considers the underlying promise of partnership in New Zealand education. It examines the potential for school-university partnerships to enhance education.

Next, it explores existing barriers to 'thinking' partnership 'better'. It identifies a barrier related to how partnerships appear to be formed without a mutually understood need. It identifies ontological concerns within current schema for conceptualising 'partnership'. It highlights an issue regarding how stakeholder agency is implicitly framed.

Finally, the discussion considers how partnership might be 'better' approached. It suggests how stakeholders might further enable the promise and potential of partnership to be realised in New Zealand education. It identifies an ontologically consistent conceptual schema that enables systemic learning, leverages epistemological diversity, and nurtures emergence of next-practice.

5.2 The promise and potential of partnership

Currently, New Zealand education institutions appear to provide partnerships with resource, knowledge, and guidance. Further, institutions appear to provide partnerships with conditions of opportunity, support, and encouragement. These current conditions appear to provide opportunities for partnerships to form, support partnerships to respond to known situations or problems, and encourage active citizenship. While different purposes of partnership were identified in Chapter 4, the Ministry of Education's argument for action uses collective national values to imagine a 'better' future, and suggest the underlying promise that partnership holds.

The next sections identify the underlying promise and potential of partnerships in education. These sections note that, for partnerships to realise their potential, partnerships operate in ways that enable learning, leverage diversity, and nurture emergence of next-practice.

5.2.1 Partnerships enable learning

Chapter 4 identified two overarching schema, two ways of currently ‘thinking’ partnership; through a lens of systemic improvement and through a lens of systems complexity theory. Within both schema, learning (to ‘cope’ with change) was found to be a pre-condition for partnership activation.

Learning can be understood as developing capacity to recognise and respond to dynamic, unpredictable situations. Such learning requires partnerships to be oriented toward agentic, active, responsive, and reflective processes that engage with a range of possible courses of action. Within both schema, the learning of individuals, institutions, and the system is intended to address identified and emergent situations because institutions in partnership are situationally interdependent. The situations that learning is intended to address are interconnected. These situations are not static and, as noted in Chapter 4, include: adaptability to an unknown future; flexible contextualisation of skills and knowledge; managing change; efficient resource utilisation; promotion of quality and consistency.

Partnership learning within the New Zealand public education system is underpinned by striving toward a realisation of collective, democratic values (of national prosperity, equity and fairness, self-realisation, and participation). Partnership is oriented toward greater capacity to ‘cope’ with change and navigate a course toward our collectively imagined future. Necessarily, partnership may require different ways to negotiate adaptive responses (or frame participant engagement, agency, empowerment, and accountability) in the future than how this occurs now. School-university partnerships are conceived to create conditions that *enable* learning together.

5.2.2 Partnerships leverage diversity

Institutions engaged in partnership present the idea of ‘partnership’ differently but positively. Collaboration is assumed to be beneficial. The underlying benefit of partnership draws on scientific metaphors of complex systems.

Partnership practice can be understood as similar to processes of biological and ecological systems, where diverse heterogeneous agents engage in mutually beneficial relationships to

survive in dynamic and unstable environments. Reciprocal relationships address overlapping habitats, limited resources, or common threats. The inter-relationships between elements in an ecological system are dynamic and unpredictable. One small change can produce significant disruption to existing interdependencies, and a new order can emerge (Sustainable Human, 2014). Species with the agility to quickly form new relationships, adapting to both environmental change and other agents within that system have the greatest capacity to survive. The underlying promise of partnership is a “collaborative advantage” (Huxham & Vangen, 2005, p.13).

A partnership cannot realise its potential with participants who tolerate or aim to overcome difference rather than leveraging the ‘ecological power’ of diversity. While such a model recognises that “mutually-constructed learning communities” (Cochran-Smith, 1991, p.109) can produce rich and deep learning, the complexity reduction process of ‘overcoming diversity’ reduces possibilities for adaptive responsiveness to unexpected change. Equally, partnership cannot realise its potential with participants who operate solely from a knowledge-transfer or resource-transfer mentality because this approach limits the partnership relationship to models of exchange rather than adaptation. Such models may not prevent a partnership from achieving its purpose, but they do not align deeply with the promise or potential of collaborative practice.

5.2.3 Partnerships are attentive to emergence

The potential of collaborative advantage is that through fostering adaptability and agility within the network agents can become attentive to emergent possibilities, and actively nurture the emergence of next-practice. This means being attentive to the current order and the possibilities emerging from within that order. It means acting intentionally to shape future possibilities in a complex system.

This study found that concepts of ‘agency’, ‘empowerment’, ‘accountability’, and ‘engagement’ presented an unresolved tension between the opportunity to act, and the motivation for taking action. This tension exists in how different schema position agents to manage an inherent unpredictability between ‘what now’ and ‘what next’ in a dynamic system. Within the Ministry of Education’s current schema there appears to be an assumption that the action of making

connections across a network will *necessarily* result in systemic learning, and that emergence will be *equivalent* to improvement. While there do not seem to be clear ways of explicitly expressing or communicating the role of participants in *choosing* agentic responses to the unpredictability between ‘what now’ and ‘what next’ in a dynamic reality, there is a vision for “responsive and resilient” (Auckland University of Technology, n.d., para.3) educators in New Zealand.

The underlying promise of partnership is collaborative advantage. Partnership promotes an education system that is more responsive and adaptive to unpredictable change. It can build capacity for judgement and action among interdependent heterogeneous agents and shape participatory citizenship. The potential of school-university partnerships in New Zealand is a capacity to encompass goals of shared adaptation in education, and to create conditions enabling learning and attentiveness to emergence of next-practice.

5.3 What hinders ‘thinking’ partnership ‘better’?

Educational institutions do not currently seem to present partnership as a vehicle for ‘shared adaptation’ or as attentive to the conditions for ‘emergence of next-practice’. There seem to be barriers underlying framing partnership in this way.

I contend that these barriers relate to how partnerships appear to be formed without a mutually understood need for ‘shared adaptation’ and the challenge of ‘thinking systemically’. These barriers are underpinned by an ontological discrepancy inherent in the systemic improvement schema. These barriers are compounded by implicit assumptions that stakeholders have capacity to live with complexity (Norman, 2011; Scardamalia, 2013) and act intentionally in complex systems.

The current conditions for partnership appear to support partnerships to develop capacities to understand and respond to unpredictable situations – to learn to cope with change – by reducing complexity. The next section will highlight how these conditions may not be sufficient to ensure that the promise of partnership is fully realised in New Zealand education. It identifies the barriers preventing stakeholders from ‘thinking’ partnership ‘better’.

5.3.1 Lack of a mutually understood need for 'shared adaptation'

Currently, there seems to be a mismatch between the potential of collaboration and the evidence of collaborative practice on publicly available documents presented by institutions engaged in school-university partnerships.

This study found that universities involved in school-university partnerships publicly align themselves at a surface level with the Ministry of Education systemic improvement discourse. However, the schools in this study do not publicly align themselves with the school-university partnerships in which they are engaged, nor with the Ministry of Education's *Communities of learning|Kāhui Ako* direction. Institutions engaged in school-university partnerships are not publicly aligned with the systemic learning partnership could achieve. They are not aligned with the potential of 'shared adaptation' that learning together encompasses, and do not represent themselves as partner organisations who act intentionally toward that goal.

Institutions do not appear to frame school-university partnership as fundamentally about learning. This study found that the presentation of 'partnership' ideas by institutions engaged in school-university partnerships assume localised structures or defined professional functions within the current system. This is despite a systemic imaginary advocating collective capacity building toward an uncertain future. This suggests systemically oriented partnership practice is not core business for institutions. The need to learn to 'cope' with unpredictable change is not centralised by institutional partners. The gap between the promise and practice of partnership in New Zealand education may exist because institutional cultures do not value the potential of 'shared adaptation' that learning together encompasses.

Partner institutions operating in environments of inherent uncertainty refrain from publishing information about their institutional learning or wider systemic learning on websites. Even if institutions are deeply committed to the vision of systemic improvement for a New Zealand and New Zealanders who lead globally (Ministry of Education, 2015c), the need of 'shared adaptation' seems tangential to public institutional priorities – such as community engagement (for schools) and enrolling candidates in initial teacher education programmes (for universities). The risk of learning together, and providing a public stance on the learning relationship, may be that it could impact negatively on other institutional priorities.

Publicly, the shared need to learn to 'cope' with uncertainty seems less than the shared need to produce 'effective' graduate teachers. The lack of a school public stance on partnerships undertaken within the *Lifting the quality of initial teacher education provision* initiative indicates that producing 'effective' graduate teachers is less of a need for schools than for universities. Nothing on school or university websites indicates that ongoing professional development for teachers is important in their partnership, nor that educational research is conducted routinely within a partnership.

Publicly, the terms 'partnership' or "integrated internship" (Victoria University of Wellington, n.d., para.4) seem to hide an underlying reality that is suggested by the lack of any shared sense of mutuality and reciprocity. Postgraduate programmes established under the *Lifting the quality of initial teacher education provision* initiative might not be "cutting-edge" (Massey University, n.d., para.3) or "future-oriented" (Auckland University of Technology, n.d., para.6) as much as dressing a far more traditional technical training model in new terminology. These school-university partnerships appear to have been founded without a truly shared need, without mutuality and reciprocity, and where universities need schools in ways that schools do not need universities. Publicly, neither institution seems to be actively learning to cope with unpredictable change and is certainly not presenting partnership as a vehicle for achieving the goal of 'shared adaptation' in an ever-changing education system.

Strengthening the capacity for agility and responsiveness – shared adaptation – to potentially enormous disruptions in the 'ecological niche' of education is the underlying promise of partnership. This foundational shared need of school-university partnership may require institutional partners to acknowledge that the promise of partnership is collaborative advantage for all education sector stakeholders and to develop capacities to 'think systemically'.

5.3.1.1 The challenge of 'thinking systemically'

To 'think systemically' may require a deep ontological shift. To 'think systemically' is to notice relationships as a starting point for understanding interactions. Participants and partner organisations may need to shift to an ontology where 'things' – the individuals, objects, or instances within a system – are no longer the primary way of understanding the system.

Instead, an ontology where relationships are the primary way of understanding the system might be more beneficial.

This ontological shift is particularly difficult in the Western tradition where people and institutions understand themselves from the inside out – i.e., looking at the world, what Durie (2002, 2014) terms ‘centripetal’ – rather than from the outside in – i.e., being of the world, what Durie (2002, 2014) terms ‘centrifugal’. Connections and relationships, while often debated, sit at the bottom rung of Western ontologies. Entities are necessary before relationships between them can be defined. In contrast, the ontology of both complexity theory and systemic improvement necessitates relationships before entities emerge.

The ontological shift required to ‘think systemically’ serves to highlight why collaborative learning is difficult for individuals and institutions. The reasons why collaborative learning is ‘good’ can be readily understood without reshaping Western ontological frames – ‘two heads are better than one’, ‘many hands make light work’. The ‘heads’ and ‘hands’ are separate objects working toward a common goal. To notice relational interactions – what happens between the ‘heads’ and ‘hands’ (not to mention the bodies they’re attached to, or the environment they’re in) – as the starting point for understanding is confounding. While it is not impossible to imagine something ‘greater than the sum of its parts’, it may be difficult to express exactly why the notes in the symphony do not ‘add up to’ the what the symphony ‘is’. Similarly, Gardner’s (2011) description of “ineffable partnership qualities” (p.82) or Schuck’s (2012) attempt to explain why “Although we had all worked in research partnerships with the other institution before ... none of us had previously experienced the degree of ... true collaboration that we were experiencing” (p.51) seem somehow incomplete. Yet, when adopting the ‘symphony’ rather than the ‘notes’ as the primary way to frame understanding it becomes easier to offer an assertion that both the number and quality of relationships and interactions are a pivotal factor in ‘shared adaptation’ and nurturing ‘emergence of next-practice’ in school-university partnerships.

The ability of institutions to frame ‘thinking systemically’, when they appear to lack any shared sense of mutuality and reciprocity related to learning to ‘cope’ with unpredictable change, seems to present a barrier to ‘thinking’ partnership in a way that enables the promise and potential of partnership to be more fully realised.

5.3.2 The ontological discrepancy

Chapter 4 identified that the lenses of complexity theory and systemic improvement both frame thinking from an ontological perspective that dynamism exists. Complexity theory conceives a non-linear, dynamic, and unpredictable reality. Cause-effect logic is redundant. Change and emergence are inherently non-linear. “Causal-thickets” are the norm and cannot be unravelled (Wimsatt, 1994, p.5). Similarly, the systemic improvement narrative is mired in the notions of volatility, uncertainty, change, and ambiguity of futures education literature. Within the systemic improvement frame, the inherent unpredictability of the future is a motivation to keep striving for a ‘better’ system.

In contrast, systemic improvement discourse also supposes that clear, predictable outcomes can be planned for and result from systemic interactions. The oxymoronic undertone of the term ‘sustainable change’ suggests a paradox within the schema of systemic improvement. The discourse of systemic improvement expresses closed-system mechanistic outcomes predicated on open, dynamic, systems complexity processes. This discrepancy in the ontology of systemic improvement clouds the Ministry of Education’s policy argument for greater collaboration. The argument for action supposes that ‘what-if’, non-linear, dynamic processes will produce anticipated, ‘if-then’, linear, cause-effect outcomes.

Change in the systemic improvement schema, ostensibly arising from creating the conditions for emergence by ensuring systems settings are “geared toward a deliberate, system-wide approach to ensure teachers can and do work together effectively” (Ministry of Education, n.d., p.2), is constrained by linear strategic planning and performance measures inherent in the current system. The “conveniently neat chronological” (Flint & Peim, 2012, p.43) narratives of change in the discourse of systemic improvement support a framework where the dynamics within partnership can be defined (or refined). Within a systemic improvement narrative, partnership dynamics can be divided into stages (Tuckman, 1965/2001) that minimise the significance of “collaborative inertia” (Huxham & Vangen, 2005, p.3) through creating an expectation that disorientation and disorder are necessary precursors to systemic transformation. In this way, both ‘transformational learning’ and ‘sustainable change’ are conceived as improvements *and* emergent properties. The cause-effect logic of ‘improvement’

emerging from a defined stage of a linear process contradicts the ontological non-linear dynamic. There is an ontological disconnect in the way that the systems complexity process of emergence is understood when appropriated by a systemic improvement narrative.

The systemic improvement dialectic intertwines disparate concepts. The fundamental paradox of the systemic improvement schema is an assumption that creating the conditions for emergence in an unpredictable system will produce a predictable systemic improvement, rather than the possibility of a *qualitatively different system*. The discourse of systemic improvement answers an assumed necessity to face the unpredictability of future change with the collective certainty of planned and strategic adaptation.

This is relevant because how agents ‘think’ about the system can have an impact on what action they take within the system. It can frame the type of processes they adopt and possibilities they imagine. It can also affect how they choose to engage within the system, influencing perceptions of their agency, authority, and capacity to adapt or ‘make a difference’.

The next sections examine how notions of ‘agency’ are shaped by this ontological discrepancy and its relevance in partnership discourse.

5.3.2.1 Framing heterogeneous agency

Emergent order of a new system can be visualised as images of starlings flocking. Solutions must be flexible to specific contexts where different enablers and constraints exist (e.g., a tree in the path of one bird, but not another). Strengthening the capacity for individual responsiveness across the flock is necessary for adapting quickly to unpredictable environments. There is an inherent unpredictability between ‘what now’ and ‘what next’. The schema of systems complexity and systemic improvement ultimately diverge in understanding this relationship between ‘what now’ and ‘what next’.

The systems complexity perspective is characterised by complex non-linear processes, where independent agents are self-organising, and from which order emerges. Within a framework of systems complexity, the operational processes are not cause-effect. However, they are simple and heuristic (Snowden, 2014a). Each bird in the flock follows simple rules; maintain a close

distance to the birds nearby, maintain a similar speed as the birds nearby. It is an agent-based model of behaviour from which a 'swarm intelligence' (Yong, 2013) emerges to accomplish the complex collective task of finding food or avoiding predators. Through a systems complexity lens, simplicity leads to complexity that, in turn, leads to resilience. Snowden's (2014b) *Cynefin Framework* (refer Figure 5) characterises this heuristic process as 'probe-sense-respond' within the *Complex* domain for sense-making.

The systemic improvement perspective involves change from one state or situation to a more desirable state or situation by increasing relational responsiveness among agents *and* reducing complexity by institutional mandate. It does not support an inherently agent-based behaviour model.

Similar to a systems complexity framework, systemic improvement involves numerous interdependent agents who are affecting change. Interactions and dynamic relationships between system elements are envisioned to provide conditions for wider learning and adaptability that produces repeatability and consistency. The assumed benefit of collaborative practice is that resources and expertise beyond one individual, group, organisation, or institution can be accessed. Wider resources and expertise are presented as advantageous because these allow for responsive relationships between elements of a system increasing opportunities for information exchange about 'what works'. Increased responsive interaction is prerequisite for improvement.

Both schema highlight that working in an uncertain and changing space requires flexibility and adaptability from all elements within the system. From a systems complexity perspective, agent-based behaviour models enable swarm intelligence to emerge. In addition to such flexibility and adaptability, the systemic improvement schema seems to require application of more constraints that reduce complexity, in order to maintain or improve predetermined measures of 'quality' and 'effectiveness' across the system. In a systemic improvement schema, sustainable change occurs when 'what works' is applied consistently across the system. Within this schema, the means to achieve a more desirable situation is more closely aligned with the process for sense-making in Snowden's (2014b) *Complicated* domain where constraints govern action and analysis informs response.

Agency is framed differently within each schema. The blurred relationships between choice and responsibility, between empowerment and accountability, are linked to how agents can ‘think’ about a dynamic reality and imagine their role within the systemic dynamism of partnership. The orientation of both institutions and individuals toward collectively adapting to uncertainty, to manage the unpredictability between the ‘what now’ and ‘what next’, and to learn to ‘cope’ with change is relevant if partnership is to fulfil its promise of collaborative advantage.

Currently, partnership relationships around notions of accountability, authority, and agency are unclear. This tension is further compounded by an ontological discrepancy apparent in the discourse of systemic improvement where “conveniently neat chronological” (Flint & Peim, 2012, p.43) narratives of change imply, through cause-effect logic, that the action of making connections across a network will result in systemic learning through increased complexity reduction around ‘what works’.

To understand the unpredictability between the ‘what now’ and ‘what next’ as an opportunity for learning, rather than as a challenge to be resolved through complexity reduction, is to affirm systemic agency and empowerment. ‘What next’ in a schema of systems complexity is a moment of potentiality. It is a moment where an agent acts intentionally, basing the action on simple heuristic principles that support the overall goal of the collective. Yet, in the schema of systemic improvement, the unpredictability between ‘what now’ and ‘what next’ exists as a means to reduce complexity, to move from ‘good practice’ toward further defining ‘best practice’ (refer Figure 5).

5.3.2.2 Agency, authority, and accountability – ‘herding’ and ‘flocking’

Metaphors of starlings flocking, ‘swarm intelligence’ (Yong, 2013), and concepts of emergence expropriated from complexity theory, fail to acknowledge that humanity is possibly more aligned with a herding instinct. An inclination toward ‘herding’ rather than ‘flocking’ might undermine the aim of collaborative advantage derived from heterogeneous responsiveness to changing circumstance. From fatally catastrophic human stampedes to closed homogenous networks online, the promise and potential of “collaborative advantage” (Huxham & Vangen, 2005, p.13) appears to first need to overcome a (positive or negative) ‘mob mentality’. This is a problem that

arises when envisioning partnerships through a systems complexity lens. The ontological discrepancy underpinning the schema of systemic improvement can be used to respond to this problem.

To explore how the ontological discrepancy underpinning the schema of systemic improvement can be useful, it is worthwhile to consider the notion of professional capital (Hargreaves & Fullan, 2012). The idea of professional capital is a complex interaction of human capital, social capital, and decisional capital in education systems. The notion of professional capital is a framework where educators have agentic ownership of systemic aims, are responsible for networked knowledge, and are collectively accountable for systemic quality. The process of generating professional capital exists in the *Complex* domain of the *Cynefin Framework* (Snowden, 2014b).

Opportunity for collective agentic ownership, responsibility, and accountability is undermined within the systemic improvement narrative by provision of linear, cause-effect, strategic performance measures and aims that are better suited to the *Complicated* domain. The systemic improvement narrative draws from the Global Education Reform Movement measures of success. These success measures support a neoliberal political agenda and the strategic targeting of future goals. These externally imposed accountability measures may confound clearer relationships between agentic choice and an agent's responsibility (Sahlberg, n.d.) in school-university partnerships. This suggests that both accountability and authority may need to rest in heterogeneous agency, rather than be relinquished to an external source if "collaborative advantage" (Huxham & Vangen, 2005, p.3) is to be achieved.

By providing a linear chronological narrative of improvement, and the 'tick-box' measures of success along the way, the discourse of systemic improvement engages participants in a step-by-step process of complexity reduction which leads to ordered patterns of behaviour within 'the herd'. These institutional 'supports' toward the desired goal may function to assist participants in defining the relationship between 'what now' and 'what next', helping them navigate inherent uncertainty and manage inherent risk. Such 'supports' promote limited choices, guide planning, and shape decision-making.

However, such institutional ‘supports’ do not promote the generation of professional capital, nor the capacities to generate professional capital in the future. The linear step-by-step processes do not engage participants with alternative processes that may better support managing emergence in a complex system. Inherent within the systemic improvement schema there is a linear, mechanistic, knowledge-transfer framework that ultimately aims to move ‘good practice’ from the *Complicated* domain into the more efficient, best-practice decision making of the *Obvious* domain.

New Zealand operates a schooling and certification framework founded on a model of linear progressions. The Ministry of Education overlays ideas of systemic capacity building with imposed structures that ensure “the purpose, scope, scale, and expected benefits” (Ministry of Education, 2015a, para.8) of partnership activity can be measured according to essential elements currently “considered necessary to achieve the goal” (Ministry of Education, 2013, para.16). Universities suggest that the institutions deliver specific information and “equip” (University of Canterbury, n.d., para.2; University of Auckland, n.d., para.5) teacher graduates with necessary skills and knowledge. Aligned with Snowden’s (2014b) *Complicated* domain, the discourse of systemic improvement promotes understandings that there is power in evidence, and that there is strength in numbers (Wastney, 2016). Such discourse implicitly abides by the adage ‘there’s safety in numbers’.

Outliers in the ‘herd’ are vulnerable to predation; there is risk apparent in wandering away from the accepted norms. Following the leader may have some biological advantage for humans (societies have ‘leaders’ and ‘followers’). Unlike ‘flocking’ where there is no clear leader or follower relationship, a ‘herding instinct’ assumes ownership, responsibility, and accountability for the collective exists, to some extent, external to the follower within the ‘herd’. The leader, to some extent, possesses the collective survival mandate. The leader has authority to define what is “considered necessary to achieve the goal” (Ministry of Education, 2013, para.16).

Thus, the ontological discrepancy of systemic improvement may exist less because of an unwillingness to acknowledge collaborative advantage derived from agent-based behaviour principles in a complex system, and more because of an inclination toward normative isomorphism that preserves sets and relations among elements and implicitly rejects independent agency. People may intuitively prefer the efficiency of decision making in the

Obvious domain to the “seriously resource-consuming activity” (Huxman & Vangan, 2005 p.13) of seeking collaborative advantage in the *Complex* domain. People may want to believe that the inherent unpredictability between the ‘what now’ and ‘what next’ can be resolved by an authority, relinquishing personal agency to the accountability of following the leader. This study found that institutions are not presenting a public stance that indicates they are operating in ways that enable systemic learning. This suggests that institutions may be implicitly aware that responding to change with agentic ownership, responsibility, and accountability could be a risk for individuals and the collective.

The gap between the promise and practice of partnership in New Zealand education, suggested by tensions between notions of ‘engagement’, ‘agency’, ‘empowerment’, and ‘accountability’ found in this study, may be understood as partners (both people and institutions) seeking to resolve the unpredictability between the ‘what now’ and ‘what next’ by relinquishing heterogeneous accountability, authority, and agency. It can also be understood as stakeholder institutions and leaders accepting authority for the ‘herd’, and not relinquishing a fear of losing control (Pawlowski, 2007).

The gap between the promise and practice of partnership in New Zealand education suggests that the ontological discrepancy in the systemic improvement schema serves a genuine purpose. It may help participants to navigate inherent uncertainty and risk. The ontological discrepancy provides scope for more strategic planning (*Complicated* domain) and more efficient decision making (*Obvious* domain) than is possible within the schema of systems complexity. Nevertheless, the ontological discrepancy also limits the capacity of partnership to be understood as a vehicle for ‘shared adaptation’ and ‘emergence of next-practice’ (*Complex* domain).

5.3.3 Implicit expectations of stakeholders

There is an array of research on school and education system effectiveness (Dufour & Eaker, 1998; Fullan, 2010; Hargreaves & Fullan, 2012; Hargreaves & Shirley, 2009; Marzano, 2003) that indicates “internal accountability must precede external accountability if lasting improvement ... [is] the goal” (Fullan & Quinn, 2016, p.111). This suggests that the potential of

partnership might not be activated in conditions where “ineffable partnership qualities” (Gardner, 2011, p.82) related to agency, responsibility, and authority are ignored.

Partner institutions learning to ‘cope’ and respond to processes of emergence within a complex system seem to be aware that there is a need to promote critique (University of Waikato, n.d.), reflection (University of Otago, 2016), and learning (Massey University, n.d.) as internal accountabilities for agents in the system – perhaps especially if there is a preference among agents toward less resource intensive and less complex ways of interacting. The desire and capacity of agents to live with complexity (Norman, 2011; Scardamalia, 2013), and manage the ontological discrepancy inherent in the systemic improvement discourse, is important if partnerships are to be responsive “to a system of shifting supports” (Gardner, 2011, p.74).

Due to the ontological discrepancy, a systemic improvement schema implicitly frames participants as concurrently knowing, producing, and communicating evidence of “what works” (Ministry of Education, 2015a, para.7) in education. This aligns with the positioning of teachers, outlined in Chapter 2, as collective communities of learners. It aligns with ideas that knowledge is generated at the intersection of theory and practice, and connects with notions of ‘boundary crossing’ and negotiation of traditional roles or responsibilities in a variety of school or university contexts. This framing implicitly conceptualises participants as people and institutions who negotiate a range of interdependent variables, and work both within and across multiple contexts. It implies participants *already* ‘think systemically’.

It is important to note that, within the systemic improvement schema, educational best-practice is not an absolute. Best-practice exists in flux. Interpreting this reality with the *Cynefin Framework* (Snowden, 2014b) indicates that while the ultimate aim of educational best-practice may be to occupy the *Obvious* domain, the process of ‘sense-analyse-respond’ related to recognising ‘good practice’ – and the “successful interpretation and implementation” (Auld & Morris, 2016, p.222) of ‘what works’ in education – occupies the *Complicated* domain. The discourse of systemic improvement *implicitly* requires heterogeneous agents to choose the most appropriate epistemological processes for their context.

While educators may feel pressured to “unlearn and re-learn in order to do educational work” (Sneddon, 2015, p.530) it is clear that in New Zealand they currently work in an interdependent,

complex, uncertain, space. Educators concurrently demonstrate best-practice through applying professional knowledge while actively inquiring (Education Council of Aotearoa New Zealand, n.d., *Practising teacher criteria*) to identify and implement 'good practice'. This is while they are "exploring new practices" (Ministry of Education, 2015a, para.2) that shift paradigms toward next-practice. Thus, concepts of 'partnership' within the systemic improvement dialectic implicitly assume educators *are* actively negotiating ongoing personal, institutional, and systemic learning.

The conceptual space between choice and commitment is irrelevant when understood via this implicit assumption – engaging in any negotiation process is both a choice for 'what now' *and* commitment to shape 'what next'. 'Partnership', within the schema of systemic improvement, includes a pre-requisite systemic understanding of and approach to diverse elements of professional interaction – stakeholders that "learn and practise concurrently" (University of Auckland, 2016b, para.10).

The systemic improvement schema includes agents who explicitly demonstrate best-practice and, concurrently, adaptively respond to emergent next-practice. Thus, this current partnership schema anticipates participants interpret their dynamic contextual reality and apply an epistemological process that best supports sense-making within that context (refer Figure 5). It anticipates participants make a choice (and commitment) to interpret relationships between 'what now' and 'what next'. This suggests that the way partnership is currently framed in New Zealand education *assumes* participants have the capacity to live with complexity, manage conceptual paradoxes related to 'quality' and 'knowledge', and act intentionally in a complex system.

There is a danger if agents do not *explicitly* understand agentic choice and commitment. The systemic improvement narrative, by utilising comparisons to high-performing or world-class education system exemplars, could result in local educators who "face constant questions about their knowledge, skills and dispositions" (Sneddon, 2015, p.529) rather than agentic professionals who act intentionally to make-sense of their current situation. The current gap between the promise and practice of partnership may exist because agents are either unaware of, or do not have/take responsibility for this implicit agency and authority.

5.4 How might we ‘think’ partnership ‘better’?

To ‘think’ partnership ‘better’ there may be a need for institutions to re-frame how processes of learning together, leveraging systemic diversity, and managing emergence of next-practice in education are understood. This re-framing may support partnership stakeholders to act intentionally in a complex system toward ‘shared adaptation’ and assist in better understanding the relationships between accountability and empowerment in partnership interactions. Similarly, the conditions for agentic responses that enable attentiveness to ‘emergence of next-practice’ in education may require a greater awareness of ‘what now’ and agentic ownership of ‘what next’. Some possibilities for ‘thinking’ partnership ‘better’ are discussed in the next sections.

5.4.1 Learning together as core business

To realign the collaborative potential of partnership toward ‘better’ partnership practice, the identified necessary conditions for partnership need to exist. Institutional partners require an understanding of their shared need, explicit reciprocity, and situational interdependence. The need to learn to ‘cope’ within a system shifting toward greater collaborative practice (whilst still competing for enrolments within a neoliberal policy framework) might be understood as the foundational shared need across institutions. This foundational shared need is more aligned with the collaborative potential of partnership.

In partnership practice, if both partner institutions share the need to learn to ‘cope’, and explore what is possible with experimental models for institutional learning, it positions partnership as an interactional space within the system promoting the emergence of innovation (Hipkins, 2011). Dewey’s Laboratory School was experimental and reshaped, to some extent, the roles and functions of those involved. The learning from Dewey’s Laboratory School also had an impact on reshaping the system of education, and reimagining possibilities in education. If institutions within the New Zealand education system are noticing the shift toward collaborative practice, then they have a key role in enabling experimentation with models and mechanisms that may promote shared adaptation to ‘cope’ with that shift. Not only does this enable ‘shared adaptation’ but it is attentive to ‘emergence of next-practice’.

This is not simple when institutional targets (e.g., for enrolments or engagement) seem to need to be set and met. Such targets prioritise an insular understanding of a 'separate institution' rather than a systemic understanding of 'educational stakeholders' – it is a 'me' rather than a 'we' understanding. Recognising the promise of collaborative advantage for all education sector stakeholders and developing capacities to 'think systemically' might need to be built into institutional cultures (where the logical coherence between 'what now' and 'what next' remains important for strategic planning and efficient decision-making). Essentially, institutions need to have a framework that enables them to live with complexity (Norman, 2011; Scardamalia, 2013) manage emergence of next-practice (Garvey Berger & Johnston, 2015), and actively learn together.

Institutional partners have to be able to foreground the promise of 'shared adaptation' as core business, while still supporting their employees with planning and decision-making. Processes that constrain day-to-day work practices to the *Obvious* domain and support the coherent narratives of change in the *Complicated* domain can give people a sense of security and linear progress. Process constraints can provide a coherent structure but allow for the diversity (Snowden, 2016) that supports learning. Valuing the learning together that partnership enables as core business does not *necessarily* mean undermining other institutional priorities, it about finding a both/and approach. If institutions are to contribute to the potential of school-university partnerships, such a model requires organisations to be oriented toward learning to 'cope' with the inherent unpredictability of 'what next' while still actively functioning in the 'what now'.

5.4.2 Leveraging systemic diversity

Currently, the two dominant schema employed within the system to frame concepts of 'partnership' each present inherent underlying barriers to partnership fulfilling its promise and potential.

While the systems complexity framework enables 'thinking systemically' because relationships are foregrounded and heterogeneous agency is essential for systemic emergence, it does not allow for what appears to be a human inclination toward isomorphism (i.e., the 'mob mentality' or 'herding instinct'). In short, framing 'partnership' solely from a systems complexity lens –

where heterogeneous agents accept an inherently unpredictable future – does not help people to understand their agency and contribution in creating a preferred future, nor support institutions to actively function in the 'what now'.

Similarly, the ontological discrepancy inherent in the systemic improvement schema favours a means of understanding that reduces complexity and prefers coherent narratives of change (Flint & Peim, 2012; Garvey Berger & Johnston, 2015). This lens is one where 'shared adaptation' cannot be core business in partnership because complexity reduction is preferred over knowledge building, knowledge creation and judgement through human agency. The ontological discrepancy in the systemic improvement narrative serves the purpose of enabling participants to engage in efficient planning and decision-making processes (i.e., helping people to understand their agency and contribution in creating a preferred future) but does not foreground the capacity building required to 'think systemically'.

To 'think systemically', is to notice the 'spaces in between' prior to noticing the entities that inhabit the spaces. It is not to reject either, rather it is being able to see from a both/and perspective that unfurls different possibilities for understanding and action (and does not *necessarily* negate complexity reduction processes). 'Thinking systemically' requires different processes for knowing and generating knowledge in different contexts, it requires awareness of the diversity of available perspectives and epistemological tools to make sense of the current situation.

A schema for imagining partnership that can support the diverse epistemological processes required for learning to 'cope' with the inherent unpredictability of 'what next' while still actively functioning in the 'what now' is the *Cynefin Framework* (Snowden, 2014b). This framework leverages an epistemological diversity in different contexts, contexts where different enablers and constraints exist. The advantage of the *Cynefin Framework* (Snowden, 2014b) is that each domain has an ontologically consistent epistemological process because agents are actively engaged in interpreting reality in a way that most suits their current contextual needs.

Having a framework where participants' collective interpretation of their context (an awareness of 'what now') is the means to accessing a process for the action of making-sense, supports heterogeneous agents within a system to take action toward a preferred future. This supports

participants to live with complexity while acting intentionally in a complex system to nurture emergence of next-practice.

5.4.3 Managing emergence

Emergence unsettles the cause-effect narrative entwined in the systemic improvement schema. This study found that the *Cynefin Framework* (Snowden, 2014b) provides a possibility for more comprehensive ways of sense-making than either the systems complexity or the systemic improvement schema alone.

This model assumes that reality is dynamic and complex, but at the same time, allows for reality to be interpreted in less complex ways. It provides a structure that enables sense-making in a complex and non-linear reality. Interpreting the present reality and applying different epistemological processes in context may be a means of managing emergence, providing institutions with a way to create a secure, comfortable space for the 'herd', and promoting an agent's capacity to live with the inherent unpredictability between 'what now' and 'what next'. The ability of agents to actively live with complexity, intentionally manage the ontological discrepancy within the systemic improvement narrative, and explore the widest range of possible futures, may be a condition for 'emergence of next-practice'.

Yet, currently, institutions do not appear to frame school-university partnership as a space for supporting the development of heterogeneous agency within the system. This study found that a tension between the opportunity to act and the motivation for taking action exists in the current ways 'partnership' is framed by different institutions. This is despite participants within a partnership being positioned as learners and navigating new spaces at the intersection of theory and practice. This suggests that participants are not supported to comprehend the importance of heterogeneous agency in a complex system. Institutions do not seem to prioritise each participant learning to comprehend their dynamic 'place' and 'space' within the system.

To realign the collaborative potential of partnership toward 'better' partnership practice, institutions might need to develop an agent's awareness of their own situational 'place' and 'space' in the system. Birds flocking are aware of relationships to other agents; in the compass directions, above, and below. Their individual 'space' within the system is defined primarily by

relationships around them and each bird must be both aware of and responsive to those relationships if order is to emerge from the flock. The US Marine's heuristics for the complex scenario when battle plans break down, "*capture the high ground, stay in touch, keep moving*" (Snowden, 2014a), indicate that these, too, are contingent on relationships – to geography, to communication networks, to physical space. The individual agent acts on principles that support the desired outcome of the collective, and can test their own compliance with these principles in real time. Creating conditions for 'swarm intelligence' (Yong, 2013) can rely on simple action principles.

The simplicity of heuristic agent-based behaviour principles resulting in 'swarm intelligence' is based on a far more relational understanding of 'place' and 'space' than the 'tick-box' quality assurance measures, and linear progressions currently evident in the New Zealand education system. Agent-based behaviour principles may enable partnerships to better manage 'thinking systemically'. The goal of education is presented by the Ministry of Education as something that can never be achieved. This goal is measured against dynamic relations to other high-performing education systems also experiencing flux. This suggests the unpredictability between the 'what now' and 'what next' is key within the system. It suggests that agentic awareness of relationships to other elements of the system needs to be more astute, that partnership may require participants to have a means of comprehending a 'centrifugal' reality and thinking more systemically.

5.5 'Better' conditions for partnership?

The tensions and paradoxes identified in Chapter 4, relating to how partnership is framed by institutions, are underpinned by two key barriers.

The first barrier is that the systemic improvement narrative is ontologically flawed and, thus, communicates processes and concepts that can appear contradictory. The second barrier is the difficulty people may have in noticing their capacity to act intentionally in a complex system. This seems to exist because there appears to be an innate preference toward stability, security, and normative isomorphism which enables the ontological discrepancy within the systemic improvement schema to serve a genuine purpose in partnership.

Any 'better' way of conceptualising partnership must meet the conditions found to support partnership. This begins with preconditions of partnerships having a shared need, an explicit reciprocity, and situational interdependence. To fulfil the promise of collaborative advantage, the foundational shared need includes learning to 'cope' with unpredictable change and, so the explicit reciprocity and situational interdependence are framed, in part, by that condition. This relates to the overarching goal of 'shared adaptation'.

The unique attributes of partnership include formalising contexts for enabling collaborative advantage (e.g., leveraging diversity, collective commitments, multiple sites for action). This reframes a conceptual space between choice and commitment, encourages 'thinking systemically', and structures ways for participants to engage with the unpredictability between 'what now' and 'what next' in an astute, responsive, agentic manner. The conditions for partnership to fulfil its promise include new ways to foreground relationships and support heuristic simplicity. Such conditions are related to an attentiveness to the 'emergence of next-practice'.

A possible way to close the gap between the promise of collaborative advantage that partnership implies, and the ways partnership is enacted could be to explicitly frame partnership interactions using the *Cynefin Framework* (Snowden, 2014b) because it provides an explicit means of 'thinking systemically'. It structures epistemological processes that leverage diverse ways of thinking and acting in the different contexts that participants navigate during partnership interactions. The heuristic simplicity of action in each domain can negate the need for the ontological discrepancy within the systemic improvement schema. Any new way of conceptualising partnership must understand the 'herd mentality' and explicitly build capacity for heterogeneous agency. These two conditions increase capacity for 'thinking systemically', and reframe working together, to 'future-proof' and enhance the education system in New Zealand.

CHAPTER SIX: CONCLUSIONS AND IMPLICATIONS

6.1 Overview

This chapter briefly summarises what was discovered in this study. It highlights opportunities for future research into school-university partnerships. It examines the implications of the gap identified between the promise and potential of partnership. Finally, it suggests some broader possibilities for research in this area.

6.2 What was discovered?

This study set out to discover the underlying assumptions presented and expressed by institutions (e.g., Ministry of Education, schools, and universities) about school-university partnerships in New Zealand. It used complexity theory as a foundation for approaching research into school-university partnerships, understanding that partnerships operate within an open social system. With a focus on conceptual schema that shape how partnership can be imagined, a total of 428 webpages were analysed. The research employed three different methods – political discourse analysis, explanatory critique, and critical realist theorising – to explore how institutions publicly present and express ideas about ‘partnership’. The different perspectives that the three methods offered helped to make underlying assumptions about partnership explicit and aided in developing an explanation of partnership.

This study found that there are four underlying purposes that partnership serves in New Zealand education: to promote quality, to promote innovation, to promote professional growth, and to promote participation. The stated purposes that partnership serves in New Zealand education are to share expertise and to work together to ‘future-proof’ the education system. The need to ‘cope’ with change, to learn to adapt to new or different situations, is central to partnership activation. The necessary conditions for partnership to exist include: a shared need, explicit reciprocity, and situational interdependence. An unstated purpose of partnership is to increase agency and capacity among agents within the system to learn to ‘cope’ together in contexts of volatile, uncertain, complex, and ambiguous futures.

This study found that partnership is unique in creating conditions for: developing formal contexts, structures, and processes for working together across institutional boundaries; pooling institutional resources; leveraging diversity; securing collective commitments; and supporting

multiple sites for feedback and action. These unique conditions *enable* learning to ‘cope’ together. They also support ‘thinking systemically’. They create spaces for thinking about partnership as an entity that is a vehicle for ‘shared adaptation’ and is attentive to ‘emergence of next-practice’ in education.

This study also found that institutions express ideas of partnership differently, and that current frameworks for thinking about partnership are somewhat flawed. The current ways of conceptualising partnership suggest that existing institutional schema contribute to a gap between the promise of what collaborative practice might achieve and what is currently happening – especially in relation to participant ‘agency’, ‘engagement’, ‘accountability’, and ‘empowerment’.

6.3 Inherent scope for further research

This section reiterates the possibilities for further research (already identified in the research design) and explains how these could add to partnership research.

In the design of this study there is inherent scope for further research. This study consciously rejected specific educational partnership contexts and expressions, which leaves opportunities for future research that are inclusive of a wider range of data.

Exploration of other educational partnership contexts, including the Early Childhood Education sector and community-driven partnerships with educational agencies, are possibilities for further research. Examination of multimedia texts about partnership on institutional websites, along with interviews with individuals participating in partnership interactions, could support wider thinking about the frames utilised to understand partnership and the conditions that support partnership.

While these research possibilities would broaden the scope, reliability, and validity of the present findings, they may also provide a more inclusive context for examining the capacities of the education system to ‘think systemically’ in approaches to partnership in the future.

6.4 Implications

This study provides a tentative explanation for the ways institutions currently ‘think’ partnership, and the conditions that may support thinking partnership ‘better’ to enhance education in New Zealand. This section highlights the implications of what has been discovered from the research. It examines the implications of the gap between the promise of partnership and how institutions (connected to the *Lifting the quality of initial teacher education provision* initiative) frame partnership. This includes an examination of that gap in the arenas of educational policy and partnership practice.

6.4.1 Gap between the ‘promise of partnership’ and ‘partnership in practice’

At present, there seems to be a gap between the promise and practice of partnership in New Zealand education. Institutions use different schema for framing the meaning of how ‘partnership’ is interpreted and represented in instantiations of practice. While institutions *are* working together to enhance education, the current conditions for partnership do not appear to be sufficient for partnership to fulfil its potential.

6.4.1.1 A ‘better’ partnership schema

The gap between promise and practice becomes apparent when the ontological discrepancy of systemic improvement discourse is exposed. This discrepancy exists in the predominant schema used by the Ministry of Education to frame policy expressions of partnership and collaborative practice.

The discrepancy within the systemic improvement schema means that the Ministry of Education presents a paradoxical positioning (i.e., ‘No-one can know for sure, but we’re certain this is essential’). The positioning may provide *opportunity* for heterogeneous agency but does not *build capacity* to enable agents within the system to learn to ‘cope’ together in contexts of volatile, uncertain, complex, and ambiguous futures.

The implication is that a more ontologically consistent framework for shaping how partnership can be imagined is relevant to ‘better’ partnership practice in New Zealand. The Ministry of Education and the New Zealand education system may need to invest in *building the capacities*

of individuals and institutions to ‘think systemically’ before assuming that current conditions for collaboration will support acting intentionally in a complex system.

Equally, for partnership practice, the implication of the ontological discrepancy is that participants need to become more aware of their ‘place’ and ‘space’ within the system, framing their understandings of partnership practice around contributions to concurrently systemic and local goals. This study has found that, currently, institutions have limited capacity to live with such complexity and manage the ontological discrepancy inherent within the schema of systemic improvement. This limitation may have arisen because institutions do not publicly represent a collaborative learning culture as core business, nor centralise the relevance of collective agentic partnership toward systemic outcomes.

The ontological framework for partnership within institutions needs to allow for functioning in the ‘what now’ and taking action toward ‘what next’ – in ways that permit efficient decision-making, strategic planning, *and* agile ‘shared adaptation’ across the system. Neither a complex systems schema nor a systemic improvement schema permit framing partnership in this way. A ‘better’, (more ontologically consistent and epistemologically flexible) partnership schema could be adapted from Snowden’s (2014b) *Cynefin Framework*.

6.4.1.2 Providing opportunity vs. Building capacity

Currently, there appears to be an assumption that providing opportunity for agentic action at a local and systemic level will create the necessary conditions for partners to orient themselves toward learning together and for participants to negotiate identity concepts.

This is especially relevant in relation to concepts of ‘agency’, ‘empowerment’, ‘authority’, and ‘accountability’ that exist in confusing (or contradictory) ways within the current partnership discourse. This contributes to the gap between the promise of partnership and how partnership can be imagined in the current system.

‘Thinking systemically’ has scope for creating conditions of ‘shared adaptation’ and for promoting attentiveness to ‘emergence of next-practice’ in education. This requires more from

institutions than provision of *opportunities* for heterogeneous agency. It requires institutions to deliberately *build capacity* among heterogeneous agents for noticing and managing emergence.

Framing partnership practice with the *Cynefin Framework* (Snowden, 2014b) has an advantage for closing the gap between providing opportunities for heterogeneous agency and building capacity for noticing and managing emergence. It can expose how an institutional culture prefers particular epistemological processes, but also introduce agents to new, structured and pragmatic, epistemological processes for making-sense within different interpretations of a current reality.

‘Thinking systemically’ requires an ontological shift to understand relationships *prior* to entities. Durie (2002; 2014) refers to this as a centrifugal way of understanding ‘place’ and ‘space’ within a system. It can also relate to heuristics, the simple ‘rules’ that result in the complex process of emergence in a dynamic system (Snowden, 2014a).

The implications for partnership practice are that there need to be ways of *building capacity* for such an ontological shift, for the emergence of ‘swarm intelligence’ (Yong, 2013) in the education system. Currently, it does not appear that there are ways to enable the existing conditions of *opportunity* for this shift to shape *building capacities* toward the shift at an intrapersonal, interpersonal, institutional, or systemic level.

6.5 What next?

This research has exposed that the schema for ‘thinking’ partnership, and the current conditions for partnership within the education system may not be sufficient to enable partnership to fulfil its promise and potential.

It has highlighted that there may be ‘better’ ways, for example the *Cynefin Framework* (Snowden, 2014b), to frame how partnership is understood and to nurture the heterogeneous agency to act intentionally in a complex system.

Opportunities exist for future research into heuristics that may permit all agents within the system to act independently toward collaborative advantage and the emergence of next-practice.

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