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Change leadership when implementing innovative learning environments

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Abstract

The educational architecture that has been built in New Zealand since 2011 has predominately been in the style of innovative learning environments (ILEs). While ILEs potentially offer teachers access to a wider range of teaching and learning approaches and more collaboration opportunities than traditional classrooms they also often require significant shifts in teacher practice to be successful. Leadership is often seen as an important factor in the successful implementation of such environments but there is very little research into the specific change leadership practices principals can employ to successfully transition their schools to ILEs.

As part of the Australian Research Council-funded Innovative Learning Environments and Teacher Change project (ILETC) an analytic autoethnographic study was undertaken to identify the change leadership practices that are most likely to lead to a successful ILE implementation. A literature review was undertaken, the key findings from which were used to develop a conceptual framework. This framework was then used in a series of interactive interviews with New Zealand primary school principals to compare their personal experience (and those of the researcher) with change leadership principles in research literature. This joint sense-making was complemented by a range of other data sources including field notes, workshop artefacts, workshop transcripts, memories and recollections. Two 'key informants' (recognised experts in the field) were also used throughout the research process to support sense-making.

The findings outline two sets of change leadership principles; a set that are important to uphold throughout the entire change process (persistent principles); and a set that are important (respectively) in the preparing, implementing and sustaining phases of a change (phase-dependent principles). These principles, when intelligently and sensitively applied by school leaders throughout the innovative learning environment implementation, will increase the likelihood a transition to ILEs will be successful, ultimately leading to improved learning and well-being outcomes for teachers and students.

Declaration

This is to certify that:

- this thesis comprises only my original work towards the Doctor of Philosophy except where reference is made in the text of it;
- due acknowledgement has been made in the text to all other materials used; and
- this thesis is no more than 100,000 words in length exclusive of tables, figures, bibliographies and appendices.

Mark Osborne

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Nāu te rourou, nāku te rourou, ka ora ai te iwi

Table of Contents

List of tables

List of figures

1 Chapter 1: Introduction

1.1 Context

"Well, I suppose you want to see what it looks like."

The Ministry official sat on one side of the rented conference room table and we sat on the other. He was there to show us the latest set of drawings for our new school. The four of us, newly appointed senior leaders, peered intently as he slid a roll of drawings from a document tube and began smoothing them out on the table. I was one of the people whose job it was to bring those sheets of paper to life: to create a school from scratch, and this was my first meeting with the Ministry of Education's New Schools Team. It was day three of the job for me.

The members of the Establishment Board of Trustees—including those who had interviewed me for the job—had emphasised just how innovative they wanted this school to be: this was an opportunity, they said, that wasn't to be squandered.

As I looked at the drawings in front of me, all I could think was:

"What the hell is *that*?"

What I was looking at was a set of drawings I would now recognise as being an 'innovative learning environment'. At the time, the designs I saw on the page were vastly different from the architecture within which I had spent my whole career. Like most teachers, I was used to the 'cells and bells' model of education: classrooms down a corridor, each discrete box inhabited by a teacher and 'their' class: rigid boundaries and dependable forms. What I was seeing in front of me was a breakdown of those boundaries and forms: walls that could become doors; smaller spaces that could become larger; classrooms that could become corridors. What I thought I knew about teaching, about learning, and about learning *environments* began to shift and change like those spaces on the page.

But let's not get ahead of ourselves.

Let's begin at the beginning.

1.1.1 Part One

To unpathed waters, undreamed shores.

—Shakespeare, The Winter's Tale

I'm an English teacher. Well, I *was* an English teacher. And like many current and ex-English teachers, I like to tell stories. This story is one that feels sometimes like a comedy and at other times like a tragedy, but according to Booker's seven basic plots in storytelling, it most closely aligns with the archetype of "The Quest" (Booker, 2004, p. 69). Bear with me here for a moment: according to Booker, the protagonist in a quest-style narrative (such as those in *The Odyssey* or *The Pilgrim's Progress*) "seeks some priceless goal, worth any effort to achieve: a treasure; a promised land; something of infinite value... whatever perils and diversions lie in wait on the way, the story is shaped by that one overriding imperative" (Booker, 2004, p. 69). In this story, what's my *overriding imperative*? Well, we'll get to that in a moment.

If I'm honest, my quest began decades ago. Most people can name an influential teacher or two in their lives, and for me, both of mine were high school English teachers. They sparked a love of novels, poetry, film and Shakespeare that has stayed with me to this day. This love shaped the final years of my schooling to the point where all I wanted to do was go to university, study English and pass that love on to others.

That's how I came to be sitting around that table in a rented conference room, poring over plans for a new school building. That's how I came to be taking on the biggest challenge of my career to date: helping to start a school from scratch. I was a deputy principal who (with the other members of the leadership team) held community meetings, appointed staff, developed a curriculum and eventually enrolled students. We started Ōkahukura College[1] from scratch. Before we knew it, we were open for learning: 230 students and two dozen teaching staff.

The first days were a heady mix of excitement, adrenaline and frantic activity: making sure that people had what they needed; that students knew where they were headed for classes; and that perhaps some learning took place. But it didn't take long for cracks to appear. In fact we were less than a week into term one when the leadership team was summoned to an after-school 'all hands' meeting. While it wasn't described as

1 Ōkahukura College is a pseudonym, as are the names of all schools and all educators mentioned in this thesis.

being one at the time, looking back I would now call what happened a 'crisis meeting'. Chairs were arranged in a circle in the staff room, and all teaching staff were there. Things started gently with people admitting to feeling that some aspects of what we were trying to achieve 'weren't working'. As a leadership team in week one of opening a new school we knew things weren't perfect; we believed things would take time to settle down and get better, but others didn't see it that way.

The list of challenges people were experiencing began to tumble out. It was a long list of tricky issues: the behaviour of some of the students was particularly difficult; the professional development was insufficient; the spaces poorly designed; the curriculum too ambitious. People were angry. Frustrated. Upset. Some felt that we'd tried to achieve too much; we'd overreached; gone too far. Some suggested that perhaps we should just be like other schools: put up walls; teach six periods a day; line students up before lessons.

As a group we began to work through the issues. Clearly there was a lot going on for people; it was unlike any meeting I'd ever been part of. As an inexperienced senior leader I looked to the principal who listened calmly without offering any miracle solutions. In hindsight, the most important thing she did during that meeting was what she *didn't* do: she didn't give in to the considerable pressure to make wholesale changes to our plan. She held her nerve and assured people that things would improve: "It's early days."

After an hour and a half of intense discussion, raised voices and a few tears, the meeting came to an end. As a senior leadership team we walked back to our shared office, each knowing that we'd just been through something extraordinary. We didn't make eye contact with each other until we were sure no one was looking. Feeling safer inside our office, we started to talk about what we'd just experienced. I wasn't quite sure what to make of things or how to respond. I found myself staring idly at the bookcase next to my desk while thinking through my next steps. The bookcase was stacked with brand new books on school leadership, some of which had never been opened, their spines unbroken. There were titles on topics such as school leadership, student-centred learning, and schools as learning organisations, but none of them looked like they held the answers to the questions I now had. Questions like "What the hell just happened there?" and "What do I do now?"

Looking back on that meeting, it was clear people were feeling challenged by a lot of things, including the transition from teaching in traditional classrooms to teaching in innovative learning environments. None of us had taught in collaborative spaces: we'd all come from the 'single-cell' tradition, so it was a huge leap for us all. The crisis meeting might have come to a satisfactory conclusion for the time being, with everybody agreeing to try to persevere with the new approaches, but the other thing it revealed to me was how little I knew about leading change. The gaps on the bookshelf mirrored the gaps in my expertise. Leading transformational change, I was beginning to discover, is very different from leading business as usual.

1.1.2 Leading 'business beyond usual'

There is a solid research base on how to lead schools effectively during times of 'business as usual'. One of the most important syntheses of this research is *School Leadership and Student Outcomes* (Robinson, Hohepa, & Lloyd, 2009). In the International Foreword (2015), Levin and Fullan praised the "specificity and precision of the findings", arguing the synthesis sits within "single best research review series on education matters around the world" (Robinson et al., 2009, p. 1). The meta-analysis draws together a range of insightful, evidence-based recommendations for school leaders seeking to improve outcomes for learners. However—as Levin and Fullan pointed out—this well-summarised existent body of school leadership research focuses on how to lead in schools during business as usual, not during business *beyond* usual; during the process of transforming them. Levin and Fullan argued that the current research base creates a powerful agenda for change but "does not tell us how to progress with this agenda in future policy and practice" (Robinson et al., 2009, p. 1). A key area requiring further research therefore is how "leaders can mobilise their organisations to move in these new directions" (Robinson et al., 2009, p. 2). In short: we know schools need to adapt and evolve, but we don't have enough research on what acts of leadership will help to achieve this.

Levin and Fullan are not alone in making this observation. A number of researchers note that 'leadership' is important in schools, particularly when those schools are undergoing significant change, but rarely do these researchers indicate which specific leadership practices, when consistently implemented, lead to the success of transformational change initiatives. The Education Foundation, for instance, observes that "major change in schools requires leadership from senior staff," stopping short of offering specific, actionable, evidence-based approaches (Education Foundation, cited in Blackmore, Bateman, Loughlin et al., 2011). Similarly, Blackmore et al. make high-level observations that “growing teacher leadership capacity”, “employing flat leadership structures” and “encouraging risk-taking” are important when leading significant change, but again stop short of offering detailed, specific approaches that leaders should employ to achieve success (Blackmore, Bateman, Cloonan et al., 2011, p. 44).

In hindsight, I can see the volumes missing from my leadership bookcase were titles like ‘How to Lead Transformational Change in Schools’, ‘Coping with Resistance to Change’, and ‘The Seven Habits of Successfully Doing What No One Has Ever Done Before’. The question facing me was, “How do I, as a school leader, support people through profoundly disorienting change; the kind that occurs when the physical learning environment becomes unrecognisable?”

1.1.3 Part Two

Five years later. The school is open, and the staff is rightly proud of what has been achieved: most students are engaged and appreciative of the student-centred culture we’ve developed; the curriculum is innovative and helping students make a difference in their lives and the world around them; achievement results are high and students are graduating with prestigious scholarships to leading universities.

It was at this point that I made the decision to leave the school; to move on. I had been involved in the highs and lows that go with opening a new school: I had taught in the new environments myself, and had led teams and individuals as they learnt how to teach in them as well. I was seeking a new challenge personally, and when one presented itself I took it, accepting a role as an education consultant working with school leaders as they developed their own approach to implementing innovative learning environments. I inevitably drew from my own experience in this new role and sought to offer schools the best advice possible. Each new project gave me further cause to look back on what we had done at Ōkahukura College and consider whether it worked or not, and whether it would also work for the school with whom I was working. The challenge for me was to move from understanding what worked in one school to understanding what worked consistently in dozens of schools across the country.

Returning to the idea of “The Quest”, I realised I had already begun my journey when sitting in the audience of a conference on innovative learning environments. The speaker had presented well and was now taking questions: he had spoken on the design and inhabitation of a new learning environment at his school. He talked about the design process, the agility of the spaces, and the ways in which staff had inhabited, and adapted to, the new learning environments. Several questions about the design were raised before somebody asked about change leadership: "Shifts in practice are clearly evident in the presentation," the questioner observed before asking, "What did the school do to help staff members transition into the new building?"

The speaker paused, looked out to a vacant space across the conference centre and considered his answer. He was obviously pausing before responding; structuring the answer as well as he could; possibly reflecting on the process they followed. I found I was leaning forward in my seat, waiting for his answer. After a time he said "*Well it wasn't like we went from over here to over there all in one go. In the middle, a whole mess of stuff went on.*"

'A whole mess of stuff?' I thought. 'What kind of *stuff*? Which bits of *stuff* worked and which bits didn't? What was discarded along the way? Was the process messy? Was it easy? What happened?'

Sitting in the auditorium, I realised the speaker had alerted me to something hiding in plain sight. *The* Quest—*My* Quest—was to take that *whole mess of stuff* and convert it into insights. Insights into what worked when leading this kind of change and what didn't. Insights from own experience and from the experiences of others. What can school leaders do to help schools transition into innovative learning environments? What's that *whole mess of stuff*?

One of the first insights I arrived at was that—looking back on my time as a deputy principal in a new high school—I was poorly equipped to help lead such a significant change effort. The other leaders around me might have been better prepared, but part of the reality of my situation was that it was only with the benefit of hindsight that I realised how little I knew. My Quest, my *thing of infinite value,* was to gain clarity about what happened, why it happened and what it meant: I wanted clarity and precision from what was currently just a *mess of stuff.*

1.2 Purpose

Few images associated with schooling are as enduring as the classroom. When asked to picture one, most people educated in the Western tradition will have no trouble calling to mind a room with desks and chairs, either in groups or facing the front, where a teacher stands and talks. The strength of this image rests on 150 years of tradition. For most of the time that formal schooling has existed, the *paradigm of one* has dominated:

> One teacher, teaching one subject to one class of one age using one curriculum at one pace, in one classroom for one hour. (Hood, 2015, p. 13)

In recent years, however, the dominance of the classroom in New Zealand schools has been challenged by two significant forces: the Ministry of Education's New Zealand School Property Strategy 2011–2021, and the 2011 Christchurch earthquakes.

Since 2011, the New Zealand Ministry of Education has sought to implement a 10-year school property strategy[2] that prioritises the construction of what the Ministry refers to as *innovative learning environments* or ILEs. According to the property strategy, a learning environment may be understood to be "the complete physical, social and pedagogical context in which learning can occur", while an *innovative* learning environment is one that is "capable of evolving and adapting as educational practices evolve and change" (New Zealand Ministry of Education, 2015a, p. 52).

In their property documentation for schools, the Ministry of Education describes *flexible learning spaces* as being:

> More open than traditional classrooms and can often accommodate more than one class and several teachers. They are often made up of many different sized spaces so they can support different ways of teaching and learning and be used for different types of activities. Many spaces have glazing between them to create open and light spaces that can be indirectly supervised. (New Zealand Ministry of Education, 2015b)

The Ministry of Education suggests that having the correct physical environment (which includes having flexible learning spaces) is a precursor to the creation of an *innovative* learning environment. To support the development of innovative learning environments throughout New Zealand, one of the three goals of the Ministry's property strategy is that schools are *fit for purpose*, which means that they:

> Comprise of flexible teaching zones that can easily be reconfigured and used in a variety of ways. They have better environmental qualities (heating, lighting, ventilation and acoustics), and are wired for ICT. (New Zealand

2 The Ministry of Education's New Zealand school property strategy 2011-2021 was in effect between the years of 2011 and 2018, before it was replaced with Te Rautaki Rawa Kura: The School Property Strategy 2030

Ministry of Education, 2011, p. 13)

The Ministry's policy is that if schools lack "the range and quality of teaching spaces needed to support educational outcomes" they will need to upgrade these spaces before they undertake other projects, effectively prioritising the development of ILEs above most other forms of property spending (New Zealand Ministry of Education, 2011, p. 13).

Figure 1.1: Examples of innovative learning environments (Wall & New Zealand Ministry of Education, 2016, p. 37).

Parallel to the implementation of the 10-year property strategy, a large-scale school reconstruction project has been running, which is known as the Greater Christchurch Education Renewal Property Programme (GCERPP) (New Zealand Government, 2013). Following the devastating 2011 earthquakes in Christchurch, the New Zealand Government embarked on an ambitious plan to regenerate 115 schools with an overall investment exceeding NZ$1.1 billion. One of the opportunities provided by the GCERPP was to rebuild Canterbury's schools, not as they were *before* the earthquakes, but as "modern, flexible and digitally connected classrooms", or innovative learning environments (New Zealand Ministry of Education, 2014, p. 2). Along with this opportunity, however, came a challenge: transitioning Canterbury's teaching workforce from one that was primarily accustomed to working in traditional classrooms to one that could successfully operate in modern, flexible innovative learning environments.

As these two key forces began to influence schooling in New Zealand, school leaders emerged as important figures in guiding their staff, students and communities through significant change. My work as an education consultant has seen me work with dozens of such schools as they seek to implement innovative learning environments, placing me in a unique position to research what works and what doesn't; to gain insights into the change process.

But before we go any further down the path, it's important to define two important concepts.

1.3 Definitions:

1.3.1 What is leadership?

Over the past thirty or forty years, a number of different models of leadership have emerged, all of which outline different approaches to the job, each with respective strengths and weaknesses. Theories such as strengths-based leadership, servant, situational, adaptive, transactional and participative leadership have all sold millions of books, alongside their myriad counterpart theories. Many of these theories concur with recent scholarship that leadership is not vested in a position or title, nor does is leadership a 'trait' or set of behaviours that one is born with. Educational leadership is defined by Robinson et al. as being:

- both positional and distributed leadership,
- highly fluid, and
- embedded in specific tasks and situations. (Robinson et al., 2009, p. 30)

As noted above, while leadership for business as usual is important, leadership on how to *progress the agenda* (Robinson et al., 2009, p. 1) is also important: leadership for transformational change.

1.3.2 What is change leadership?

While the terms are often used interchangeably, many researchers including Kotter consider change *management* and change *leadership* to be quite different concepts. Change management (defined by Kotter) is "a set of basic tools or structures intended to keep any change effort under control" (Kotter, 2011). The goal of change management, Kotter argues, is to minimise the distractions and impacts of the change: to get the project completed on-time, on-target and on-budget. In this type of approach, there isn't space for unanticipated outcomes: what is needed is control and restriction.

In contrast, change *leadership* concerns "the driving forces, visions and processes that fuel large-scale transformation" (Kotter, 2011). Change leadership, argued Kotter, is not a controlled process; it offers the possibility that things might get “a little bit out of control”. Another way of conceptualising these two principles is that change management is controlling a process so that there are no unanticipated outcomes (on time, on budget, on target), whereas change leadership is the act of facilitating a process that gives rise to (hopefully positive) unanticipated outcomes: new methods, new perspectives, new tools; approaches the leader couldn’t have thought of on their own, with the organisation growing in capability as a result.

1.4 Literature Review

If I’m seeking to research what school leaders do to *successfully* implement innovative learning environments, the first challenge is to define what I mean by success. Can one say there is a definitively *correct* way to teach within an ILE, and that all teachers should align themselves with this ideal? Is there even a single measure of success? Given the varied and nuanced contexts from which all schools investing in innovative learning environments come, a single definition of success is problematic. A school in a socially and ethnically diverse urban context might seek to achieve a different set of outcomes from a school in a small, rural setting as they implement changed environments.

While acknowledging this challenge, Blackmore et al. offer four potential metrics for measuring success that might be useful regardless of school context: educator orientation to space, rethinking practices for teaching, adoption and use of space, and collaborative planning and teaching (Blackmore, Bateman, Loughlin, et al., 2011, p. 2). Ultimately, however, I am most comfortable asking the school leaders and the schools themselves to define what they mean by a ‘successful’ ILE implementation. The challenge of defining success is only one of many that arise when undertaking this kind of subjective research. As Ellis et al. put it, in contexts such as the ones I operate in, “the ‘facts’ and ‘truths’ … found [are] inextricably linked to the vocabularies and paradigms use to present them” (Ellis, Adams, & Bochner, 2011, p. 274).

To identify potential leadership practices that might lead to the successful implementation of an innovative learning environment I undertook a series of literature searches using the EBSCO Discovery Service as well as other research databases. I devised a methodology (outlined in **Appendix A**) that used different combinations of relevant keywords and subject topics, such as ‘change leadership’, ‘change management', 'leading change', 'innovative learning environments', 'new generation learning environments' and 'modern learning environments'. These searches generated very few results related to innovative learning environments, which was perhaps to be expected given that, as Blackmore et al. found, the research literature surrounding ILEs is mostly concentrated in the design phase, with little attention paid to (among other things) "the organisational cultures and leadership that facilitate or impede innovative pedagogies in new spaces" (Blackmore, Bateman, Loughlin, O'Mara, & Aranda, 2011, p. v).

What I found was there simply isn't a strong body of research related to the change leadership processes required during the implementation of innovative learning environments. There are studies that look specifically at implementing *virtual* learning environments, and while these might be considered *innovative*, they are not the collaborative, open, flexible *physical* spaces with which I am concerned.

Problematically, while a small portion of the research into leadership during significant change initiatives comes from within education, most of the literature comes from other sectors. One may look at a case study of 3M Corporation's infamous change in organisational culture during the early 2000s (Canato, Ravasi, & Phillips, 2013) or the leadership of Coach Phil Jackson during the Chicago Bulls' turbulent time without star player Michael Jordan (Heifetz & Linsky, 2002), but these studies might prove to be industry-specific, the lessons not applicable to education at all.

While at this point the reader might expect a researcher to dedicate an entire chapter to the current state of research literature in their chosen area of study, the methodology I have selected employs existent research in a slightly different manner, using it to gain insights into participants' lived experience. This approach—common in analytic autoethnographies—is explained in further detail in Chapter 2: Methodology and methods.

As I explored more of this research, I became increasingly curious about two things.

- Which principles from the scant literature into leading transformational change in schools applies to the implementation of innovative learning environments?
- Which principles from outside the field of education might serve to guide school leaders toward successful implementations?

Over a period of six months, this curiosity coalesced into the following research question.

1.5 Research question:

"What leadership practices are most likely to lead to the successful implementation of an innovative learning environment?"

2 Chapter 2: Methodology and methods

2.1 Design

Arguably the central methodological challenge that needed to be addressed throughout this research project was that of my position within the research context and the communities under observation: my job was, and is, to work with school leaders to help them successfully implement innovative learning environments. In doing so I enact dual roles as both research participant and researcher; I'm attempting to shift practice while at the same time analysing what works when attempting to shift practice. When I moved from being a teacher to being a consultant in schools, much of my work centred on researching and writing about the implementation of innovative learning environments, and providing support for educators and leaders to successfully implement those environments. As time passed I realised the role centred on three acts:

- identifying which strategies were successful in schools and which were not;
- considering what led to one strategy succeeding and other failing; and
- reflecting on how best to implement successful strategies to the benefit of other schools.

I also came to the realisation that it was possible for a change to be unsuccessful because of an "implementation failure rather than flaws innate in the change initiative itself" (Choi, 2011, p. 479). In other words: the strategy the principal and I chose might have been the correct strategy, but the way we went about implementing it meant it was ultimately unsuccessful.

The tension inherent in these dual roles (within and beyond a school) became more pronounced when I decided to enrol in a PhD and undertake formal research into change leadership. I realised that my enrolment moved me from informally holding a dual participant role to formally holding one: I was now officially a *researcher* while also being a practitioner. This transition carried significant implications: at the heart of my relationship with school leadership teams is a commercial agreement by which we work to devise and implement interventions that might help them to successfully implement their innovative learning environments. One of the most significant challenges associated with occupying dual roles relates to attempting to maintain objectivity in the research process. The relationship between consultant and school leader is based on an understanding that the consultant is there to make changes throughout the process: I'm there to act as an instigator and catalyst in schools. My job is to jump into the research context and muddy the waters; it's what I'm paid to do.

Yet as I progressed through the early stages of my PhD I realised that, in both researcher and practitioner roles, I was trying to achieve the same objective: what Weick describes as *sense-making* or "structuring the unknown" (Weick, 1995, p. 4). Sense-making is the process of "organising flux", which is a good description of what I try to do across a complex overlap of contexts, relationships and events, to achieve the following outcomes.

- To help school leaders make sense of their own jobs. Resolving questions such as: In what ways is this type of work congruent with the theories outlined in the broader literature base on school leadership and in what ways does it require a departure from it?
- To help school leaders make sense of the situations they find themselves in, which are often complex, emergent, dynamic and unbounded; and to help them use that understanding to provide support to those around them.
- To draw lessons from one context and apply them intelligently in others: identifying what led to either 'success' or 'failure' and mobilising that knowledge. The further I went into my research, the more I realised the sense-making (generating insights) and communication work (diffusing those insights to others) I was doing lent itself to the production of "meaningful, accessible, and evocative research, grounded in personal experience" (Ellis, Adams, & Bochner, 2011, p. 274). If I were to produce this meaningful, accessible research, I would need to address several methodological concerns.
- I have a personal relationship with the research participants: I know them well and they know me. Typically, in this kind of change leadership implementation work, the school leader and consultant work together closely to not only share the highs but also shoulder the lows of a project. In this context we were emotionally and professionally entwined and joint authors of the narrative.
- There is a commercial arrangement between me and the school leaders alongside whom I work. My job is to help them lead change. To attempt to be impartial in

the research process—to stand back and to be a fly on the wall—would jeopardise not only my professional position, but also those of the school leaders with whom I work.

- Traditional, 'objective' approaches to research clearly don't fit this context. The idea of me (as a 'knowledgeable outsider') entering the research context, dispassionately observing cultural members, then leaving to write about the culture feels like a betrayal, if not exploitation. There are many arguments over whether research in certain situations can truly be objective, but in my case I feel the argument is a relatively easy one: there is no way this research can be objective. However I dress it up, it will struggle to pass the test of fairness, accuracy, and lack of bias.

These three central challenges contributed to a growing sense of unease around playing the role of "silent author" in my research (Struthers, 2012, p. 68). I'm an observer of, and a participant within, the research context, I am both gazed upon and the gazer. It's impossible to escape "the influence [my] previous experiences may have on [my] representations of data" (as Quicke, 2008 describes the use of self in Struthers, 2012, p. 68). My preference is to *use* self; to break my silence and explore cultural experiences at a personal level. In breaking my silence I hope am able to achieve what Struthers also achieved: an awareness of how "self-understanding may lead to informed teaching practices" (Struthers, 2012, p. 68).

So I began to explore potential methodologies. Quantitative approaches didn't seem to fit: I couldn't create any sort of argument that the best way to capture and make sense of rich, colourful, lived human experiences is to turn them into a set of numbers and graphs. Qualitative research approaches seemed much more appropriate for this kind of messy, imprecise, human work.

So what was I asking of a potential methodology? It needed to cope with the following elements of context.

- I'm a central and visible figure in the research.
- There are complex relationships at play between me and other participants in the research context.
- The sites within which I work are not a representative selection of New Zealand, nor are they a randomised sample. They are self-selected as people who have

chosen to work with me.

- We are all committed to arriving at analytical understandings that are as generalisable as possible so that we (and others) may learn from our own and each other's experience. Given the singularity of each school's context, these understandings may not be the kind of "undebatable conclusions" sought by some (Ellis & Bochner, 2000, p. 744).

With these considerations in mind I began to explore potential methodologies.

2.1.1 Case studies

One methodology I considered was that of case studies, using single, collective or multiple cases. One might see a school or a group of schools implementing innovative learning environments as a bounded entity (or set of bounded entities) and through case study analysis, they might be studied in a descriptive, exploratory, or explanatory way to identify the leadership practices that supported successful implementation. While a single intrinsic or instrumental case study might be useful, one would probably look to take a collective approach, whereby several cases might illustrate some key principles that, when enacted, lead to a greater likelihood of success.

Case studies certainly have the advantage of versatility. They are well known for allowing the study of a range of emergent possibilities:

> Single or multiple phenomena or multiple examples of one phenomenon. The researcher can study one bounded entity in a holistic fashion or multiple subunits embedded within that entity. (Salkind, 2010, p. 10)

If I had chosen to take a case study approach, it would have certainly allowed others to 'live the experience' of these school leaders and their communities and to draw lessons from this experience. Employing Thomas's typology of *subject* and *object* in case studies, schools and school leaders would be the subject of the study while the object would be their emerging conceptual frameworks for successful implementation of ILEs (Thomas, 2011, p. 511).

However, one shortcoming of this approach is the challenge of positioning me as the researcher. I'm actually in the research context making changes; I'm not simply an outsider. As I work alongside school leaders to collaboratively devise strategies that might lead to a successful ILE implementation, at what point do these interventions cease to be individual contribution from either me (as the consultant) or the school (as the client) and become a form of shared knowledge: the result of collaborative sense-making? My presence and influence in the case study context made this approach problematic.

2.1.2 Ethnography

Another approach that came closer to resolving the elements of 'the challenge of self' is conventional ethnography. A useful definition is offered by Willis and Trondman:

> [Ethnography is] a methodology that draws on a family of methods involving direct and sustained social contact with agents, and on richly writing up the encounter, respecting, recording, representing, at least partly in its own terms, the irreducibility of human experience. (Willis & Trondman, 2000, p. 5)

While it's true that I have "direct and sustained social contact" with members of the community under study (in the same way that I might say I have direct and sustained social contact with my family), it's closer to the truth to say that I don't simply have contact with them; I am them. And they are me.

As far as the actions of the ethnographer are concerned, Hammersley and Atkinson describe it as participating:

> Overtly or covertly, in people's daily lives for an extended period of time, watching what happens, listening to what is said, asking questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned. (Hammersley & Atkinson, 1983, p. 2)

An ethnographic approach certainly promised to preserve the richness of the practice under observation without reducing it to "a few statistical or typological representations" (Reilly, 2012, p. 14). With the right approach it would also offer a level of "reflexiv[ity] about the role of the researcher and the messiness of the research process" (Reilly, 2012, p. 14). However, if a form of ethnography were to be chosen, it would need to be able to accommodate my position as an active participant in the research context.

So what forms of ethnography might be able to do this? Hamilton, Smith, and Worthington (2008, pp. 19–22) offer three potential approaches to self-study that might be useful:

- Narrative inquiry (which Hamilton et al. define as "a look at a story of self"), is based on Dewey's assertion that our lived life brings to bear notions that influence our lived educational experiences (Connelly & Clandinin, 1990, p. 3). Narrative inquiry is often a story of "experience that attempts to share information and learn from it" (Hamilton et al., 2008, p. 20).

- Narrative ethnographies refer to "texts presented in the form of stories that incorporate the ethnographer's experiences into the ethnographic descriptions and analysis of others" (Ellis et al., 2011, p. 278). While the narrative approach might help to capture and document the *experiences* of school leaders guiding schools into new-generation learning spaces, this approach might not offer others in similar situations the ability to easily draw lessons they may apply to their own situation, presenting many of the same challenges of generalisation as evocative autoethnography. What might be far more useful to external observers is a framework of leadership practices that have led to positive outcomes, and a way of giving life to this framework through the description of how it applies to real-world situations.
- Self-study is a look at self in action, or "intentional and systematic inquiry into one's own practice" (Dinkelman, 2003, p. 8). Autobiography and narrative voice are essential parts of self-study and are used to uncover one's "knowledge about practice" (Dinkelman, 2003, p. 9). Self-study is self-initiated and self-focused (LaBoskey, 2004) but also involves a thoughtful look at "texts read, experiences had, people known and ideas considered" (Hamilton et al., 2008, p. 20).

However, all three of these approaches place a level of emphasis on me as an individual in a way that doesn't sit comfortably. They don't address the complex social situations at play in my work: in this kind of leadership, many of the decisions made, interventions devised, and epiphanies arrived at are co-constructed and co-owned. Undue focus on me as an individual would not accurately represent the reality. One approach that seems to address these concerns about collaboration and interdependence is autoethnography, which Hamilton defines as "a look at self within a larger context" (Hamilton et al., 2008, p. 17).

2.1.3 Autoethnography

Ellis et al. (2011) defined autoethnographers as researchers who:

> Retrospectively and selectively write about epiphanies that stem from, or are made possible by, being part of a culture and/or by possessing a particular cultural identity. (2011, p. 276)

This approach of positioning a researcher not as the centre of the research endeavour, but as one member of the community under study directly addresses the shortcomings of other approaches to self-study, particularly shortcomings relating to the socially constructed nature of knowledge. Autoethnographers seek "to produce aesthetic and evocative thick descriptions of personal *and interpersonal* experience [emphasis added]" (Ellis et al., 2011, p. 277).

Anderson described ethnographies concerned primarily with capturing and describing "what is going on" as being *evocative autoethnographies* (Anderson, 2006, p. 387), arguing the primary goal of such works is:

> Narrative fidelity to and compelling description of subjective emotional experiences [to] create an emotional resonance with the reader.

To achieve this emotional resonance, to "take us to the depths of personal feeling, [to] lead us to be emotionally moved and sympathetically understand" (Anderson, 2006, p. 385) evocative autoethnographies often take the form of a first-person narrative in short-story or novel form. Spry, for instance, describes her narrative autoethnography as "a vehicle of emancipation from cultural and familial identity scripts that have structured my identity personally and professionally" (Spry, 2001, p. 708).

Ellis et al. organise these "evocative" forms of autoethnography into three categories (Ellis et al., 2011, Chapter 4.1):

- Interpretive, performance autoethnography, which turns a person's life story into a critical, performance practice that "begins with the biography of the writer and moves outward to culture, discourse, history and ideology" (Denzin, 2013, p. x).
- Reflexive ethnographies look at the changes that take place within a researcher as a result of completing their fieldwork and analysis. Ellis describes this as "making the ethnographer's 'backstage' research endeavors the focus of investigation" (Ellis et al., 2011, p. 278).
- Community autoethnographies use "the personal experience of researchers-in-collaboration to illustrate how a community manifests particular social/cultural issues" (Ellis et al., 2011, p. 278). Co-constructed narratives illustrate the meanings of relational experiences, particularly how people collaboratively cope with the ambiguities, uncertainties, and contradictions of being friends, family, and/or intimate partners.

These evocative forms of autoethnography often centre on the process of *witnessing* or “validating the meaning of a participant’s pain, or allowing a researcher or author to identify other problems that are cloaked in secrecy” (Ellis et al., 2011, p. 280). In my context, there was some merit in exploring the notion of witnessing: the experience of a principal leading transformational change in a school is often one of isolation, significant responsibility and painful decision-making. An evocative ethnography would certainly “validate the meaning of their pain” (Ellis et al., 2011, p. 280).

However, I wanted to go beyond merely witnessing the change leader’s experience; I wanted to better *understand* that experience. While *emotional resonance* and feelings of emancipation might be important parts of understanding the *personal* experience of school leaders leading transformational change, on their own they won’t offer a *theoretical* understanding of the issue; and they certainly won’t prepare other school leaders to undertake similar processes. Purely evocative approaches to autoethnography have been criticised for the “rejection of traditional analytic goals such as abstraction and generalisation” (Pace, 2012, p. 2), as Mitch Allen warns budding autoethnographers:

> [You’re] telling [your] story—and that’s nice—but people do that on Oprah every day. Why is your story more valid than anyone else’s? What makes your story more valid is that *you are a researcher* [emphasis added]. (Allen, cited in Ellis et al., 2011, p. 276)

The driving motivation of my professional work is a desire to support school leaders to successfully implement change, and generalisability is an essential component of this work: it’s essential when one moves from one school or context to another. I feel that Ellis et al. are exactly describing my situation when they say that researchers—in addition to merely *telling* about experiences—are often required to offer a level of analysis around these experiences using “methodological tools and research literature” (Ellis et al., 2011, p. 276). This, they argue, is a way for the researcher to use personal experience to illustrate facets of cultural experience, and, in so doing, illuminate for others “unfamiliar cultural processes” (Ellis et al., 2011, p. 283).

I therefore concluded the most appropriate methodologies in my situation were those which acknowledged a researcher’s visibility within the research context and sought to “accommodate subjectivity, emotionality, and the researcher’s influence on research, rather than hiding from these matters or assuming they don’t exist.” (Ellis et al., 2011, p. 274) while simultaneously committing to analyse those experiences.

Indeed the goal of autoethnography as it is defined by Davies is to "seek to develop forms of research that fully acknowledge and utilize subjective experience as an intrinsic part of research" (Davies, 1999, p. 5). This subjective experience allows a unique opportunity to study a culture's relational practices, common values and beliefs, and shared purposes in order to help insiders (cultural members) and outsiders (cultural strangers) to better understand the culture (Maso, 2001, cited in Ellis et al., 2011, p. 276)

Ellis et al. argue that autoethnographers must:

> Not only use their methodological tools and research literature to analyze experience, but also must consider ways others may experience similar epiphanies. (Ellis et al., 2011, p. 276)

They also argue that autoethnographers must:

> Use personal experience to illustrate facets of cultural experience, and, in so doing, make characteristics of a culture familiar for insiders and outsiders. (Ellis et al., 2011, p. 276)

The form of autoethnography therefore, must be appropriate for the goal of the research: to analyse personal experience and to illustrate facets of cultural experience.

2.1.4 Analytic Autoethnography

In another context, case studies, ethnographic self-study, or even evocative forms of autoethnography might have suited the research context, but given my personal and professional goal to work alongside leaders to devise interventions, engage in sense-making and move insights to new contexts, these approaches didn't fit well. For various reasons, these methodologies don't acknowledge the rich, complex relationships that exist between researcher and co-participants. Similarly, these methods would also present problems of validity by not properly addressing the researcher's role as an agent of change in the schools or organisations under study.

To address the challenges associated with more evocative forms of evocative autoethnography, I chose to employ an emerging form of autoethnography: *analytic autoethnography*. This is an approach whose purpose is to "understand the topic under study by placing it within a *social analytic* context [emphasis added]" (Anderson, 2006, p. 378). Anderson proposed that analytic autoethnography occurs when the researcher is:

- a full member in the research group or setting;
- visible as such a member in published texts; and
- committed to developing theoretical understandings of broader social phenomena.

The key feature that differentiates analytic autoethnography from other forms of autoethnography is the third: a commitment to an "analytic research agenda focused on improving theoretical understandings of broader social phenomena" (Anderson, 2006, p. 375). Applied to my work in schools, this approach allowed me to improve the wider community's theoretical understandings related to change leadership when implementing innovative learning environments, but it also extended the reach of this theoretical understanding by producing more "accessible texts...able to reach wider and more diverse mass audiences" than conventional approaches to research (Ellis et al., 2011, p. 277). My visibility as both participant and researcher, and the personal nature of this research make "social and personal change possible for more people" (Ellis et al., 2011, p. 277).

Anderson sets out five features of autoethnographies that make them *analytic*, each of which carries with it a set of advantages. Firstly, the researcher must hold Complete Member Researcher (CMR) status, or be a full member in the social world under study (in my case this would be schools designing and implementing innovative learning environments) and, while being a member of such a community, the researcher should "record events and conversations, at times making fieldwork "near[ly] schizophrenic in its frenzied multiple focus" (Adler & Adler, 1987, p. 70). An advantage of the researcher holding a CMR role is the way that it facilitates the availability of data. Autoethnographic researchers are often able to "meld research goals with a variety interests, including making a living" (Anderson, 2006, p. 389), which means the research project (and therefore time dedicated to data collection) is able to assume a higher priority in one's professional life. Anderson argued that this embeddedness, sustained over time, gives the researcher rich access to data and to *insider meanings*, the attainment of which is difficult for researchers employing other methodologies. Another advantage of this kind of reflexive, sustained immersion in a social world is that it allows "the autoethnographer multiple reasons to participate in the social world under study, and thus, multiple incentives to spend time in the field" (Anderson, 2006, p. 389).

Second, there must be a level of analytic reflexivity which, as Davies observes: "expresses researchers' awareness of their necessary connection to the research situation and hence their effects upon it" (Davies, 1999, p. 7). In my situation, this "necessary connection" to the research context is my membership of the community with the positives and negatives that accompany it, which include access to insider meanings (positive), but also the potential blind spots that come from being sharing a similar perspective to the co-participants (negative).

A third feature of analytic autoethnography is the narrative visibility of the researcher's self, which avoids the sense that the researcher is a "hidden and yet seemingly omniscient presence" (Anderson, 2006, p. 384) or silent author in the text. This resolves some of the methodological challenges identified above, particularly the challenge of how I position myself. Within my research context, narrative visibility and reflexivity will help to address the challenges surrounding the subjectivity of me recommending that a principal takes particular course of action, or even when I accede to group pressure or the pragmatics of a given situation. Narrative visibility must "textually acknowledge and reflexively assess the ways in which [the researcher's] participation reproduces and/or transforms social understandings and relations" (Anderson, 2006, p. 385).

A fourth feature of analytic autoethnography is that the research must feature dialogue with informants beyond the self. Davies argues that the analytic autoethnographer views relational activity "not in terms of self-absorption, but rather [relative to] interrelationships between researcher and others to inform and change social knowledge" (Davies, 1999, p. 184).

Finally, according to Anderson, there must be a commitment to theoretical analysis, which goes beyond simply documenting personal experience to provide an "insider's perspective". This final feature of analytic autoethnography is at the heart of my experience as a researcher: a desire for theoretical analysis of transformational change projects so that others may share in the insights I generate. Anderson argues that "the defining characteristic of analytic social science is to use empirical data to gain insight into some broader set of social phenomena than those provided by the data themselves" (Anderson, 2006, p. 387).

As defined by Anderson above, an advantage of analytic autoethnography is its ability (through providing the researcher with extended time in the field, Anderson, 2006, p.

380) to challenge "the dangerously misleading preconceptions that social scientists can [sometimes] bring to research" (Hammersley & Atkinson, 1983, pp. 23–24). If a researcher is able to spend more focused time in the field, they are less likely to become 'armchair theorists' who misread situations or fail to understand key insights.

Alongside these advantages however, there are a number of potential pitfalls which analytic autoethnographers should attempt to mitigate. The first is around focus: although autoethnographers have the advantage of 'using life's precious time efficiently' by immersing themselves in their field, they should be careful not to let their research focus fade out of awareness in the face of other pressing and enticing engagements in the field, and they should also not allow themselves to be drawn into participating heavily in activities in the field at the expense of writing field notes (Anderson, 2006, p. 389). This challenge can be mitigated by having a detailed, clear data collection plan which isn't exclusively reliant on field notes, and which seeks to incorporate other data sources including interviews and document analysis.

Another pitfall that can lessen the reliability of analytic autoethnography research is reliance on exclusively internal sources of data such as personal memory and recall. Chang notes that autoethnographers should support their arguments both with "broad-based data from external sources" (Chang, 2008, p. 55), as well as *internal* data—that which is based on the researcher's recollections and notes. Accordingly, my data collection plan seeks to balance internal and external data sources, outlined later under the heading 'Data Collection'.

Autoethnography has also been criticised for a potential lack of generalisability (Pace, 2012, p. 3), given the researcher's subjective role in the social world under study. Although generalisability is a desirable (but not essential) feature of research of this nature, *analytic* autoethnography does require an approach that offers a layer of abstraction that may assist others in applying the research to their own context. To this end I used a conceptual framework others might see the essential change principles at work and consider how they might apply in their own specific and unique contexts.

The use of a conceptual framework also helps to offset another potential danger associated with autoethnography: an overemphasis on narration rather than analysis and interpretation (Chang, 2008, p. 55). Chang warns that autoethnographers can sometimes get swept up in "the power of storytelling", a sentiment Coia and Taylor echo, arguing that in order to reflect on our experiences, "it is not enough simply to tell the story or write a journal entry" (Coia & Taylor, 2005, p. 19).

Another potential pitfall that autoethnographers can sometimes fall into is neglecting ethical standards regarding others in self-narratives. Simply because an autoethnographer is telling the story, this does not mean they *own* it (Chang, 2008, p. 55). This notion of *own*ership sits alongside the challenge of an autoethnographer focussing excessively on themselves rather than remembering that autoethnography is "a study of the researcher's own people" (Hayano, 1979, p. 99). I employed several strategies to mitigate this risk (including obvious approaches to ethics such as the use of anonymising devices) but the central mitigation strategy has been the use of interactive interviews to gather external data. The nature of interactive interviews is that insights and the generation of knowledge are seen as collaborative endeavours between researchers and co-participants, during which both parties probe in conversation the issues associated with a particular topic. The most crucial outcome of this process being a 'no surprises' co-ownership of the insights that are generated.

2.2 Methods

In addition to the criticisms outlined above, autoethnographers have had others levelled at them: they do too little fieldwork; they observe too few cultural members; they don't spend enough time with others (Ellis et al., 2011, p. 283). Having chosen *analytic* autoethnography as my methodology, I felt my approach to data collection needed to both fit the research context and methodology, as well address these kinds of criticisms. To achieve this, Ellis proposes three potential approaches to data collection in autoethnographies:

- comparing and contrasting personal experience against existing research;
- interviewing cultural members; and
- examining relevant cultural artefacts (Ellis et al., 2011, p. 276).

Each of these approaches has merit and offers researchers the opportunity to go beyond merely capturing personal experience (witnessing) into analytic examination of the phenomenon under investigation. I decided to develop a data collection plan that made use of all three approaches.

2.2.1 Comparing and contrasting personal experience against existing research

Another criticism of autoethnographies is that they are "insufficiently rigorous, theoretical, and analytical, and too aesthetic, emotional, and therapeutic" (Ellis et al., 2011, p. 283). To ensure analysis is prioritised as highly as experience in their research, analytic autoethnographers compare and contrast personal experiences with existing research. One method commonly employed is the development and use of a conceptual framework (Hamdan, 2012; Struthers, 2012; Wall, 2006).

A conceptual framework acts as a hypothesis or a collection of assumptions (from existing research in similar contexts) against which researchers compare and contrast their own (and others') personal experiences. I was aware that my personal memories and recollections would provide the majority of the data for this research project, but I was also conscious of the need to strengthen the theoretical and analytical rigour of potential findings by moving beyond my personal experience and I became increasingly convinced that a conceptual framework would help me do this.

To develop the framework, I returned to the literature review which I initially undertook to arrive at my research question. I took the material on change leadership I had found and began to assemble it into a coherent framework of assumptions and theories so that it might be used with co-participants. Since this early collation phase, the literature review has undergone the kind of "spiraling refinement, elaboration, extension, and revision of theoretical understanding" that is common to analytic autoethnography (Anderson, 2006, p. 388). Throughout Chapter 3 I explain how my theoretical understanding has consolidated and been refined as a result of interactive interviews with co-participants.

2.2.2 Interviewing cultural members

As outlined earlier, I have always been uncomfortable with the focus of this research project being placed solely on me. The work I do is in collaboration with others and the insights generated are never arrived at by a single person. This commitment to community rather than the self has emerged out of a desire to avoid other criticisms sometimes levelled at autoethnographers: that they are "navel-gazers... self-absorbed narcissists... too aesthetic, emotional, and therapeutic" (Ellis et al., 2011, p. 283). Interviewing other cultural members (co-participants) has allowed me to respond to these criticisms by including in my research what Anderson refers to as the "defining feature" of analytic autoethnography:

> [The] value-added quality of not only truthfully rendering the social world under investigation but also transcending that world through broader

generalization. (Anderson, 2006, p. 388)

My research is not therapy. Nor is it navel-gazing. It's committed to the dual acts of *rendering* and *transcending* the social world under investigation. My "broader generalisations" come, not only from the use of a conceptual framework, but also from the opportunity to ask questions of others who were in that social world at the time and as intimately acquainted with the context and culture as I was. With them, I'm able to engage in joint sense-making, exploring questions like "Why do *you* think that event occurred?" and "What was your take on that?"

2.2.2.1 Selection of co-participants

Researchers "identify populations for investigation using whatever criteria are relevant to establishing the boundaries of the phenomenon" (Preissle Goetz & LeCompte, 1984, p. 66) and I am no different. While autoethnographies don't attempt to achieve representative selections—they are by their nature subjective and personal—the wider the pool of data is, the greater the likelihood the insights generated will be sound and generalisable.

Selection of co-participants was guided by the Merton's observation that the autoethnographer is "the ultimate participant in a dual participant-observer role" (Merton, 1988, p. 18). I am part of a community of educators who are undertaking significant change efforts as part of transitioning schools into innovative learning environments. My experience, firstly as a senior leader leading such a transition and, secondly, as a facilitator who now helps others do the same in their own schools positions me within that community.

Clearly co-participants need to be selected, based on their membership of the community under exploration, which in this case involves being part of "a social world with clear locales and sub-culture" (Anderson, 2006, p. 379). In my situation, the "social world" is the group of New Zealand primary schools who are transitioning to innovative learning environments, a representative subset of which would be the schools who have engaged me to support them with the change process over a period of not less than 24 months.

Selection of co-participants is guided by thoughts of where to position the researcher in relation to others within the cultural group. One bias present in my approach was a desire to extract maximum usefulness from the study: to help other facilitators and school leaders learn from my experiences. In order to achieve this, the study aimed to investigate my own life experience (supporting schools through change) but to "include others with a similar experience as co-participants" (Chang, 2008, p. 65).

Acknowledging three school principals as *co-participants* is deliberate: when I work with them (as indeed happens when I work with all of my clients) I'm careful to ensure that I'm not riding in to be a hero who achieves great outcomes before riding off again. I see my role as being one of collaboration and capability building. Lao Tzu came close to describing my perspective when he said:

> When the Master governs, the people are hardly aware that he exists.
> When his work is done, the people say, "Amazing: we did it, all by ourselves!" (Tzu & Mitchell, 1988, Chapter 17)

One adjustment I would make to this quotation is that I'm not working to fulfil *my* aim; it's the *principal's* aim I am seeking to achieve. The intention behind all of my work is to build an internal locus of control: to try to grow people's capability to lead the change themselves, not an external locus.

Although "numerous well-respected and even classic studies have been produced using the single case study" (Baker & Edwards, 2012, p. 8), in order to triangulate my experience across more than one school context, I selected three co-participants, all of whom were principals of primary schools who transitioned from separate classrooms to what could be described as innovative learning environments. They have all completed a transition to these type of learning environments so that the majority of the teaching and learning in their schools takes place in collaborative spaces. Some of these principals had completed that journey several years before the interviews took place, while another completed it the year before. Beyond this, I have been careful to include minimal demographic and biographical detail about co-participants or their schools in the study, in order to maintain anonymity.

The selection criteria for co-participants was that they needed to:

- be principals of New Zealand primary schools;
- have recently transitioned their schools from traditional classrooms to ILEs; and
- have had a professional relationship with me in excess of two years.

In defining selection by these criteria, I attempted to maximise the likelihood that the joint sense-making we were to undertake would have the benefit of "extended first-hand contact with the people and settings concerned" which provides the autoethnographer with "the opportunity to check out his or her understanding of the phenomena under study" (Hammersley & Atkinson, 1983, pp. 23–24).

It's important to note here the forms of bias inherent in my selection of co-participants. Firstly, selection bias is present because of i) the existence of a relationship between school leaders and me, the researcher, and ii) the fact that the school leaders probably knew enough about the complexities of change leadership to seek assistance from a consultant like me. This kind of bias is inescapable in autoethnography because only members from within the community can generate the kind of *insider meanings* required of analytic autoethnography. In this respect, selection (or self-selection) bias is not a weakness but a strength: we are more likely to arrive at insights because of the selection rather than in spite of it. However, the use of multiple co-participants and a conceptual framework provides me with the opportunity to triangulate insights with other principals' experiences and with peer-reviewed research findings.

Another form of bias is exclusion bias: observations about leadership are being made from the leader's perspective of what works; not from teacher, student or parent perspective; however, I have chosen principals because they are most often the people who are ultimately responsible for the change implementation, and who are most privy to the 'behind closed doors' decisions and conversations related to the change process. It is, of course, possible that the principal's perceptions of what worked (or the level of success achieved) might be different from those of teachers or other participants, but this is an area for another researcher to explore.

I have tried to hedge against acquiescence (or 'yea-saying') bias by selecting co-participants with whom I have had a professional and personal relationship of more than two years. In truth, I have worked with all of the co-participants I selected for at least four years so our level of candour with each other is high, and I believe we are not afraid to explore sensitive topics because of concerns around social acceptability.

Another form of bias is survivorship bias because, by definition, the principals I've chosen to work with are ones that have successfully implemented ILEs; however, this is inherent in the nature of the research question. We want to identify the factors that worked, not the myriad factors that didn't.

In addition to selecting co-participants based on the criteria outlined above, I engaged two *key informants* who acted to triangulate the insights the co-participants and I generated with their experience in the sector, both nationally and internationally. A key informant is "an individual who has the role of confidant and trusted advisor to the researcher" (Madge, 1953, Tremblay 1957, cited in Carrico, 2009) and is not chosen on a random basis. They are selected because "they possess special qualifications such as a particular status, wide communications, or even accurate information for the study" (Young & Young, 1961, p. 141).

2.2.3 Examining relevant cultural artefacts

The third form of data which Ellis advocates the use of are "cultural artefacts" (Ellis et al., 2011, p. 276). In my context, these take the form of field notes, records of meetings in journals, correspondence between co-participants and me, and material prepared for—and produced during—professional learning sessions undertaken with schools.

2.3 Data sources

Noting Ellis et al.'s advice to avoid "excessive naval gazing" and other potential shortcomings of more evocative forms of autoethnography (Ellis et al., 2011, p. 276), the data sources I employed can be categorised into two broad areas.

- Internal data (from my own experiences): memories; recollections; a timeline of events from my appointment calendar; personal reflections and insights supported by journals, field notes, the conceptual framework and other cultural artefacts. These internal data informed my systematic self-observation: my daily activities, personal values and preferences, epiphanies and self-reflexivity.
- External data (from others' experiences): transcripts of interactive interviews with co-participants and key informants; correspondence with relevant parties; documents, presentations and other records of relevant activities that occurred in schools.

2.4 Data collection

A central question I had to answer before formally beginning the joint sense-making process with co-participants was the best approach to take when interviewing them. To select the best approach I considered a range of commonly employed methods.

- Structured interviews, while having the advantage of offering a robust exploration of a conceptual framework, do not allow much scope for joint sense-making through conversation and deviation from a fixed set of predetermined questions. James and Given refer to these kinds of interviews as “verbal approximations of a questionnaire with explicit research goals” (2014, p. 8).
- Semi-structured interviews also appeared useful; however, given that reflection and sense-making between interviews forms an important part of the reflective process, I wanted an approach that allowed for each set of the three conversations to follow their own narrative and for subsequent interviews to build on material covered in previous sessions. Given that semi-structured interviews “generally serve comparative and representative purposes—comparing responses and putting them in the context of common group beliefs and themes” (James & Given, 2014, p. 8), this approach didn’t offer enough scope for the story of each school to stand uniquely on its own.
- Unstructured interviews seemed unsuitable from the outset because of their inability to deal adequately with a conceptual framework. My approach required a level of control over the nature of the questions, without the co-participants being able to change the topic, to add new ideas and or explore unrelated ideas of interest to them. I also wanted to be able to bring participants back to essential elements of the conceptual framework if I felt we were avoiding important issues.

Having considered and eliminated these three approaches, I sought out different approaches that might meet my requirements. The most promising candidate was a form of retrospective interview technique called *interactive* interviews. Ellis et al. describe interactive interviews as having the following four features:

- They are collaborative endeavours between researchers and participants, during which both parties probe together the issues that transpire, in conversation, about particular topics.
- They usually consist of multiple interview sessions.
- They are situated within the context of emerging and well-established relationships among participants and interviewers (unlike traditional one-on-one interviews with strangers).

- They focus on what can be learned from interaction within the interview setting as well as on the stories that each person brings to the research encounter (Ellis et al., 2011, p. 279).

Each of these features contribute to the joint sense-making process at the heart of analytic autoethnography. The implementation of change (particularly transformational change) is often emotionally fraught and, as Ellis et al. note, interactive interviews are particularly useful in these situations because they allow researchers to acquire "in-depth and intimate understanding of people's experiences with emotionally charged and sensitive topics" (Ellis, Kiesinger, & Tillmann-Healy, 1997, p. 121).

The interviews were semi-structured in nature and centred on a set of interview questions developed in line with the principles for narrative interviewing set out by Ayres (2008). The questions were:

- carefully ordered to build on previous questions (and interviews);
- sufficiently open-ended to encourage participants to explain themselves fully;
- alternated between using neutral probes to elicit information about actions and explanations, and evaluative and reflective questions to assist sense-making;
- not closed or offering a set of fixed choices;
- designed to elicit the thinking that underlies the connection of the events or experiences selected for the informant's story, using questions such as, "How did you feel when…?" or "Why do you think that happened?" (Ayres, 2008, p. 3).

My ultimate goal for the set of interactive interviews was for them to act as a vehicle for me, as a researcher, to "retroactively and selectively write about past experiences" (Ellis et al., 2011, p. 275) in a way that was enriched and clarified by the perspectives and experiences of co-participants. To make the research as useful as possible to others, I felt it best to explore epiphanies (intense situations) and:

> The effects that linger—recollections, memories, images, feelings—long after a crucial incident is supposedly finished. (Bochner, 1984, p. 595)

Having worked with each of my co-participants for a number of years, it felt a bit like a reunion heading back into their schools to undertake the interviews: catching up with DPs, team leaders and teachers as I walked through the corridors and classrooms. One principal insisted on taking me for a walk through the spaces to see how everyone was going while also asking my advice about one space that he was puzzling over; it was just like old times. I reflected on how the relationship between school and consultant evolves over time, and even though the most intense part of our work is over—the transition to ILEs complete—I still feel invested in the schools and a shared responsibility to get the best outcome, even now.

At Pukeiti School, I walked through a learning environment where I saw one of the teachers I remembered as one of the strongest resisters during the transition. Yet there she was, working in a collaborative space with a small group of students as happy as could be. Her eyes lit up when she saw me and she called out “Mark!” She called me over and took the time to point out the different zones she and her co-teaching partners had established and how they were being used. I got the feeling she wasn’t necessarily showing me my ideas were being used; she was genuinely proud of the progress she had personally made.

As I settled into the process of conducting each the nine interactive interviews I scheduled with the co-participants, I noticed a familiar pattern emerge: I would meet the principal in their office or a meeting room; set up laptop, notes and recording; chat about how things were going; then begin exploring the questions, loosely related to the different parts of the conceptual framework. Inevitably events we explored in previous sessions came up and we looked back on our previous discussions with further reflection engaging in “collaborative sense-making”: reflecting on what worked, why it worked and what we would have if it hadn’t worked.

During the interactive interviews I did not reveal the substance of the conceptual framework to co-participants so their comments and observations were as uncontaminated by my early research as possible. The questions I asked were as open-ended as possible and I coded the transcripts using the ideas contained in the conceptual framework, using these as the primary unit of analysis.

Following each interview I transcribed the interviews using the original audio. I then imported the transcripts into NVivo 12 to begin coding. My initial set of codes was a nested set developed using the conceptual framework: persistent and phase-dependent principles, preparing for change, readiness for change, and sustaining change, each with their own set of sub-codes.

When I came across an insight into the change process that didn’t neatly fit the initial set of codes, I created a new code, which I then used to review the previous transcripts in an iterative fashion. The set of codes evolved this kind of spiralling, iterative fashion, in a process similar to the development of the conceptual framework itself.

There is a strange, ‘out of body’ experience that comes with looping back on transcripts of conversations one has been part of. It’s a bit like being a fly on the wall seeing yourself gradually make sense of something. Observations that weren’t immediately apparent to me in the early interviews began to emerge in the days and weeks that followed, enhanced by subsequent interviews, reading and analysis. Each iterative pass over the recordings and transcripts revealed new insights which I could then share with co-participants in the following interview.

2.5 Data analysis

Given the complex nature of the data being gathered, the tools for analysis need to be able to make sense of, and preserve, the integrity of co-constructed, narrative, subjective and relationship-based data. Chang advises against approaching the analysis and writing process with preconceived notions of predicted outcomes, cautioning that in autoethnography “data analysis and interpretation hinge on data collection, often not prescribed by a rigid research design” (Chang, 2008, p. 67). A flexible plan to analyse and interpret data is required because of the fluidity of the process.

2.5.1 Narrative analysis

Riessman defines personal narratives as:

> Brief, topically specific stories organized around characters, setting, and plot... discrete stories told in response to single questions; they recapitulate specific events the narrator witnessed or experienced. (Riessman, 2003, p. 335)

An approach to the analysis of these kinds of narratives—one which resists a ‘prescribed’ or ‘rigid’ approach—is the use of narrative analysis which researchers, including Cortazzi, view as being particularly useful for the analysis of educators’ experiences (Cortazzi, 1993, Chapter 2). Noting that narratives “do not mirror, they refract the past”, and that “strategic interests influence how storytellers choose to connect events and make them meaningful for others” (Riessman, 2005, p. 6), it’s useful to use Grumet’s “triad of voices” (*situation*, *narrative* and *interpretation*) as a way to engage in sense-making (Grumet, 1990, p.281). Situation is the context of the narrative:

physical, social, cultural, political; narrative relates to the specific experiences of teaching focussed through the teacher's voice; and interpretation is a more "reflexive and distant" voice: reflection on the meaning of the narrative and its relevance to current circumstances (Cortazzi, 1993, p. 11). When viewed from these three perspectives, events and memories can reveal deeper insights from those possible when events are viewed from a single perspective.

Riessman has demonstrated that narrative analysis is suitable (not only for educator's stories) but also for disruptive life events and "social movements, political change, and macro-level phenomena" (Riessman, 2003, p. 335), a definition which includes advances in education, such as the development of innovative learning environments.

The narrative approach to interviews and their analysis "bases itself upon the ongoing development of the respondent's viewpoint during the course of the interview" (Miller, 2003, p. 208). These viewpoints are essential to the analysis because "for narrativists, there is not a single objective reality that is factual and existing at a level of abstraction beyond the current situation" (Miller, 2003, p. 208).

2.6 Conceptual framework

To fulfil what Ellis et al. describe as a researcher's scholarly obligations of "hypothesizing, analyzing, and theorizing" (Ellis et al., 2011, p. 283), I developed a conceptual framework as an aid to sense-making with co-participants. Conceptual frameworks are not "readily found within the literature" (University of Southern California Libraries, 2019), which means they are often generated by researchers through the synthesis of existing research. Their defining feature is that they contain "concepts and… existing theory that is used for [a] particular study" (University of Southern California Libraries, 2019). This is certainly the case in my context: there is no existent comprehensive change leadership framework associated with the implementation of ILEs; but there *are* principles and theories scattered throughout the rebase that might prove useful for those undertaking such implementations. A conceptual framework would draw these fragments together into a form that might support the analysis of cultural members' personal experiences.

2.6.1 Process

Building on the initial literature review I undertook to help determine my research question, I began to undertake broader searches combining search terms such as 'change leadership' and 'education', 'schools' and 'schooling' with finding potential change leadership frameworks or sets of principles that lead to successful transformational change implementations within education. Not able to find any such frameworks or models, I began to look for change leadership frameworks from beyond education that might be robust enough to structure the sense-making of my research.

A key starting point for me, however, was John Kotter's (1996) eight step change leadership process. While the model identifies three distinct phases in a change process (a principle I adopted), it wasn't able to accommodate the complexity of a change as large as moving to innovative learning environments. For example, while leaders might develop a sense of urgency within people, they also need to develop an individual's capability to act on that sense of urgency lest feelings of frustration or ineffectuality set in. Kotter's model offers very little advice on how to build individual employee capability or self-efficacy.

Other models such as Lewin's three step organisational change process of "unfreezing", "moving" and "refreezing" (Burke, Lake, & Paine, 2009, p. 235) seemed too limited to be able to respond to ongoing, emergent, complex change. The idea of 'freezing' an organisation at the end of change process seems counter-intuitive to the development of adaptive capacity, or to helping an organisation cope in a fast-moving world.

What I realised was that none of these existent frameworks were quite right for the context. I was going to have to build my own, one that drew together the most appropriate principles from a range of other frameworks.

3 Chapter 3: Conceptual Framework

3.1 Before:

Workshop transcript: Kirikiriroa College, Friday June 15th 2018.

If you've ever tried to lead a change process, you'll know that you have to work with human beings, and they can be weird and unpredictable. [Muffled laughter]. The two ways that people most often learn how to lead change projects is by observing others and through trial and error. The problem with both of these is that you might be observing someone who has quite a different skillset and approach from you, and while it's good to look at a range of different ways of doing things, you shouldn't try to be someone else when you're in a leadership role—you have to find your own authentic approach to leading. The second approach—trial and error—becomes a problem when there's too much error with your trial. [Muffled laughter]. People can get burnt in a change process through false starts or approaches that (with the best of intentions) lead to frustration because of unsuccessful outcomes. Through trial and error you can actually lead people to be less open and less receptive to change if you're not careful.

3.2 After:

Workshop transcript: Pikirangi School, Friday 15th Feb 2019.

At the start of my PhD I constantly wondered if, at its heart, change was an irredeemably unpredictable process, but now I believe order and structure is always present in change, but it might not always be visible. There are frameworks and approaches at play which (when you're aware of them) can be used to support people through change processes. It's not so much that change is chaotic; it's that we lack the frameworks to interpret and make sense of it.

These two transcripts (one from a period early in the process of developing the conceptual framework and one from later) illustrate one of the most significant insights I gained in my research. The cautious, apprehensive tone I took in the first workshop ("beware 'trial and error'", "people can get burnt", "frustration", "unsuccessful outcomes") reflects one of the central doubts from the initial stages of my research: that it is simply not possible to bring analysis and structure to something that is inherently unstructured and subjective. Can order be brought to something that appears totally dependent on context and the people involved in it?

That uncertain tone disappears from the second transcript, replaced by a growing sense that change can be analysed and arranged into some form of order. I can see now that I didn't hold my initial belief that change is chaotic because it is; I held that belief because I was unable to perceive and make sense of the mechanisms at play. Those mechanisms are there; I just couldn't see what was happening behind the curtain.

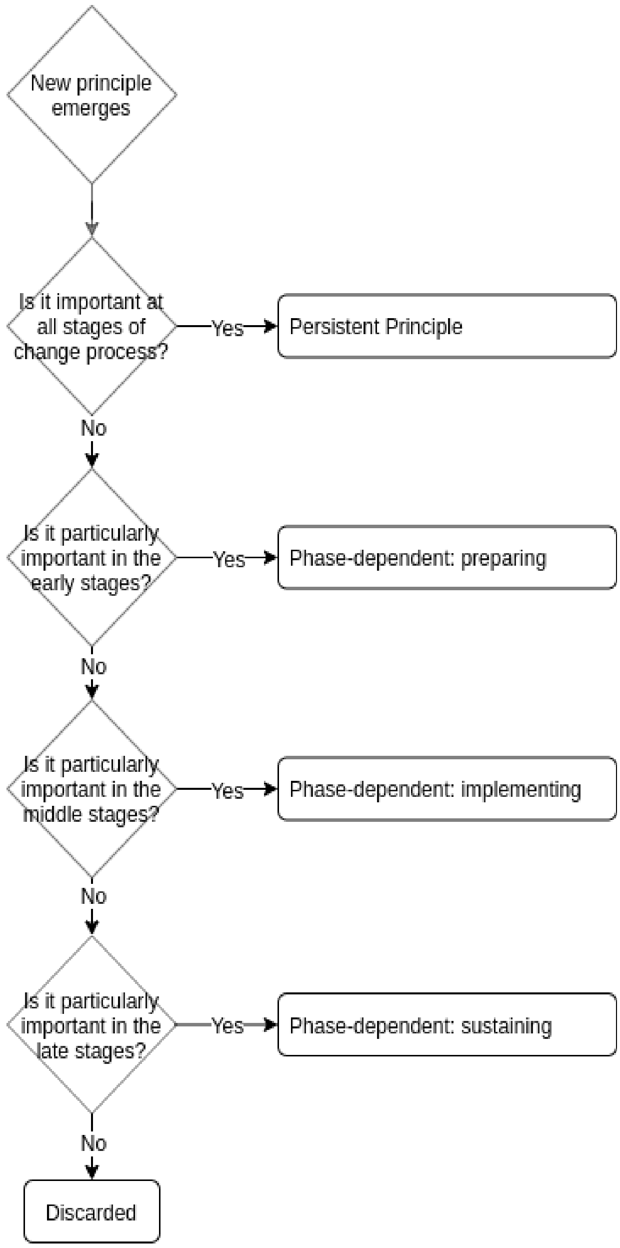

Figure 3.1: Change principles decision flow chart

The process of refining the conceptual framework (Figure 3.1), and using it to generate insights with co-participants and key informants gave me increasing levels of confidence that leaders can indeed bring structure and order to change. My research has never been about reducing change to some kind of formula or rigid template—I believe there are too many variables in contexts for this to be possible—but, at the same time, there are enough patterns and consistencies between

successful
change initiatives for one to arrive at a generalised set of guiding principles.

Anderson notes that conceptual frameworks undergo “spiraling refinement, elaboration, extension, and revision of theoretical understanding” (Anderson, 2006, p. 388), and this was certainly my experience. As I got closer to undertaking interactive interviews with co-participants I began to test draft versions of the conceptual framework in public to see if people challenged, or concurred with them.

At a very high level, the conceptual framework is comprised of two distinct sets of guiding principles:

- those that are important regardless of where a leader or school is in terms of the process (*persistent* principles of change); and
- those that are important during particular phases of a change process (*phase-dependent* principles of change).

3.3 Persistent principles

Throughout the development of the conceptual framework, a number of principles emerged as important irrespective of whether participants were at the start of a change process or at the end of it. These *atemporal* principles should be upheld consistently throughout the entire process of change. There is also clear evidence that some actions are *temporal*: more important to undertake respectively during the early, middle or late stages of a change initiative. An example of a temporal principle is the act of building ‘readiness for change’, which, when it occurs early in a change effort, is “a viable predictor of perceived benefits of the change process one year later” (Drzensky, Egold, & van Dick, 2012, p. 103). Clearly, waiting until the end of the process to build ‘change readiness’ would be counterproductive.

I will now briefly introduce each of these five *persistent* principles of change, before going on to examine each one in greater detail. Change efforts are most likely to be successful when they align with each of the following persistent principles:

- Values-based: the more closely aligned a change initiative is to the stated values of organisations and individuals, the more likely it is to be successful (Ansari, Fiss, & Zajac, 2010).
- Participatory: people are more likely to feel affective commitment to, and

therefore a sense of energy towards, a change initiative if they have actively participated in the planning and completion of that initiative (Aiken & Keller, 2009, sec. Introduction).

- Inclusive: change is more likely to be successful when participants believe the change will be of benefit not only to them personally but also to others (Choi, 2011, p. 482).
- Incremental: change is more sustainable when it occurs in smaller, incremental steps rather than in large “seismic” steps (Waters, Marzano, & McNulty, 2003, p. 8).
- Distributed: if a change is to endure beyond the initial enthusiasm of an implementation phase; if it is to become part of the *culture* of an organisation, it should be adopted across the whole organisation, not confined to the margins (Ansari et al., 2010).

3.3.1 Align change with organisational vision and values

> Strong reasons make strong actions.
>
> —Shakespeare, King John

“Well if we’re going to talk about vision, the best story is the one about Sir Peter Blake and Team New Zealand. Have I told you that one?”

I’m back at Pikirangi School, working with their middle and senior leaders on the importance of vision in school leadership. The principal is one of the most effective I know, but this year she’s had quite a bit of turnover in her leadership team so she’s asked me to come in to work on building the capability of these newly promoted classroom teachers. In our session we’ve been talking about how a shared vision offers people a consistent definition of success across the organisation: if you’re leading change, it helps if everyone’s facing the right direction. At the start of the session I used one of my favourite quotations about the importance of vision:

> To plow [sic] a straight line in a field, you look at a tree on the other side and never stop looking at the tree. That’s what guides you. This direction you’re going in, how consistent is it with that tree? (Moshe Cohen, cited in Roberts, 2016, sec. 6)

The “tree” these leaders should be looking at is their organisation’s vision statement, and the point I emphasise in this conversation is that people are more likely to travel in a straight line towards the goal if they have their eyes fixed on a point at the far end of the field, in the future. The overall vision (the tree) helps people to make decisions about what's happening at their feet (right now). It was this conversation that brought us round to the Sir Peter Blake anecdote.

It's said that Sir Peter's mantra for Team New Zealand, competing first to win and then defend yachting's famous America's Cup, was "Will it make the boat go faster?" (Dalmau Consulting, 2013). Sir Peter reportedly said: "Everyone's got a boat, there's no advantage there. If we're going to win, we're going to have to have the *fastest* boat." That vision (having the fastest boat in the regatta) became the tree on the other side of the field for Team New Zealand, helping them to make decisions about what was right at their feet. They reportedly didn't offer coffee to visitors because there was a perfectly good café next door and making coffee wasn't their core business: it wouldn't make the boat go faster. Nor did they buy brand new desks, whiteboards or filing cabinets for their office because those items don't help to make the boat go faster. The money they saved on coffee and office furniture could be put into better design innovations, more time in the wind tunnel or another set of sails that *did* help to make the boat go faster. The scratched furniture was a visible representation, every time a team member walked into a room or showed a visitor around of what the team's priorities were: of their tree on the other side of the field.

I finished telling the story and was about to unpack the implications with the leaders when the principal stopped me and said: "You know Mark, it's all about painting the picture." I paused before responding, knowing she had a tendency in these meetings to say things to me not so *I* could hear her say them but so *her team* could hear her say them. She continued:

> I remember an experienced principal once told me that *painting the picture* for people is really important. In my head it's always crystal clear—what it looks like. But I don't always do a good job of painting the picture for people. What I've learnt over the years is that the picture's no good in my head. It has to be in everyone's head. Once that's happened; we're in business.

It was at that point we stopped to explore what this meant for each of them as leaders. A shared *painted picture* is key; it's not enough for *the leader* to have a clear vision for the organisation; every member of the team needs to have that same painted picture in their own heads. When everyone unites and moves towards the same tree, vision statements coordinate and align the actions of different people; establish a common vision for success; motivate people to take action in the right direction; and simplify and remove clutter (Kotter, 1996, pp. 69–70).

The image to which my principal friend was referring (the painted picture) was an analogue for the organisation's 'desired aspirational future state':

> Visions are powerful mental images of what we want to create in the future. They reflect what we care about most, and are harmonious with our values and sense of purpose. (Parker, 1990, p. 2 cited in Atkin, 1996, p. 1)

These 'powerful mental images' generate energy in organisations because they provide "a picture of the future with some implicit or explicit commentary on why people should strive to create that future" (Kotter, 1996, p. 68).

The importance of painting the picture was a lesson I took into my work at Ōpapa School, and it wasn't lost on Principal Klaus either. He was well aware of the power of a unifying, compelling vision, and he and I worked hard to ensure the redevelopment of the school's learning environments aligned closely with the school's vision, which was widely referred to by the school community as the "The Ōpapa Way".

Ōpapa's building development emerged out of a set of external circumstances that had more to do with the Ministry of Education and the way school property improvements are funded in New Zealand than the school's vision. While he could have taken the easier path, saying to his community, "The Ministry of Education has demanded we do this!" Principal Klaus resisted, knowing staff and community would not be fully committed to the project if they felt they were merely implementing an external mandate. A vision that had emerged from the community would be much more powerful. Klaus and I talked about this and we knew that if people were given an opportunity to take ownership of the development (and to align it to the stated vision of the school) they were more likely to be committed to it when times got tough. As Klaus put it: "If we'd said 'Oh it's a Ministry initiative,' it would have led the conversation in a way that wasn't healthy or helpful." The energy and commitment to the change would not be as strong and that was neither healthy nor helpful.

Working with Principal Klaus I came to see that "The Ōpapa Way" had what I believe are the three essential elements of a compelling vision. It was:

- aspirational and for the greater good;

- shared by all members of the community; and
- linked to the past but committed to moving beyond it.

Aspirational and for the greater good

Hill and Jones describe an organisation's vision as an articulation of its "desired future state" (Hill & Jones, 2012, p. 15), or its *aspiration*. Without a sense of aspiration in a vision statement, complacency creeps in. As Principal Klaus observed:

> If you aspire for just what it's like today, you just naturally end up going backwards... Keep having that aspiration of how you see the school being by the end of the following year and the following year. That's really important.

The development of an aspirational vision for learning at Pukeiti School took a significant step forward when the senior leadership team visited a school that had already implemented innovative learning environments. When they saw the kind of learning that was possible in flexible spaces, the senior leadership team realised their existing vision was limited by what they believed was achievable in their *current* buildings: their thinking was so enmeshed in their physical environment, it didn't occur to them that learning could be a lot more than what it currently was. Principal Vikram realised that their existing vision was not aspirational enough:

> We got to go through the rooms which was amazing. We went into some spaces where there were some kids mixing a sound tape… It just seemed like a place (if you're a child) you'd want to be there at school because you were humming. Making swords outside...that sort of thing.

These new possibilities for learning hadn't entered the minds of the Pukeiti team partly because there was no way to realise them in the standard classroom physical configuration of the school; these possibilities required collaboration and flexible use of space. This glimpse of a new reality was a significant turning point for the school, because it helped to provide what Parker refers to as "fuel" or energy for change:

> The tension we feel from comparing our mental image of a desired future with today's reality is what fuels a vision. (Parker, 1990, p. 2, cited in Atkin, 1996, p. 1)

However, it's not enough for a vision simply to be aspirational, it also needs to be linked to the greater good. What the Pukeiti leadership team realised was that their new vision also provided the opportunity for people to contribute effort for the wider benefit of others, not just for themselves. Heifetz refers defines a greater good as being a goal that is characterised by "socially useful outcomes," without which [he argues] adaptive change is not possible. It is the energy that is generated by a higher ideal, not the mere satisfying of one's own needs that truly motivates people (Heifetz, 1994, p. 24).

Throughout the work, Pukeiti Principal Vikram and I sought to ensure the benefits that innovative learning environments might offer students (the socially useful outcomes) were central and visible to people. Part of our deliberate use of language centred on decreasing inequity between classes. Principal Vikram one day mused:

> How can I ensure [a good education] for each kid that comes in to Pukeiti? It shouldn't be dependent upon whether I can keep that teacher; whether I can keep this teacher; whether I can fill their class with no behaviour issues so that teacher who doesn't cope with behaviour can deal with it and just teach.

Many of these traditional accommodations made in single cell classrooms (such as trying to avoid placing challenging children in classes with teachers who don't cope well with behavioural issues) led to inequitable outcomes, and Principal Vikram was adamant it couldn't continue indefinitely: "We can't do that. We can't put Band-Aids over all the time; eventually it just breaks down." The drive to ensure a consistently excellent education across the school, regardless of teacher, became a key part of our communication with teachers, parents and students. It was our key to socially useful outcomes and served as fuel for the change effort.

Connecting change to a great good also enables leaders to ensure people don't mistakenly believe the change is about the leader themselves. As Principal Klaus advises: "Don't make it the *whomever* show." Change should never be about a single person or their agenda; it should be about those whom the organisation serves—the students, their families and the community. The 'why' of a change should always supersede the will of any individual, regardless of their position or how much power they hold. As Principal Klaus reminded me: "It makes things a hell of lot easier because you just remove yourself from the decision-making and the reasons behind [the building development]."

This kind of selfless leadership, which focuses on meeting the needs of those whom the organisation serves, is referred to as *servant* leadership by authors such as Robert Greenleaf. His book, *Servant Leadership* (Greenleaf, 2002), has the most fascinating subtitle: "*A journey into the heart of legitimate power and greatness.*" For a person who has some familiarity with servant leadership, the subtitle is somewhat jarring. Servant leadership draws inspiration from the biblical stories of Jesus; a man so selfless and ready to serve that the ideas of power and greatness seem contradictory. The first time I came across servant leadership was working with a great leadership-focused principal who happened also to be Catholic. When she introduced this particular theory during a leadership coaching session, I wasn't quite sure what she was trying to achieve. (Was she trying to convert us? Did she want us to go to confession?)

The penny dropped for me when she explained that historically leaders in the *heroic* tradition have seen the people below them in the organisational hierarchy as functionaries whose primary purpose is to help the leader achieve their goals. In the servant leadership tradition, the leader is servant first and their purpose is not to pursue their own self-serving ends but to ask, "What do these people need *from me*?" Applying a servant leadership lens to the implementation of an ILE, the key question to be asked is "How will this initiative benefit teachers and students rather than serve to advance the interests or status of the leader who is implementing it?"

Returning to Greenleaf's curious subtitle, when a leader uses the power structures, resources and public platforms they have available to them to advance the cause of others who don't enjoy such privilege, they exercise *legitimate power and greatness.* Legitimacy only occurs when leaders act on behalf of others, not for themselves. Compelling, engaging visions of the future are often strongly grounded in 'generous public-mindedness', not in self-advancement.

Shared by all members of the community

A second feature of a compelling vision statement is that all members of the community feel ownership of it, and a sense of commitment to it. A vision statement that only the senior leadership team (or the Board of Trustees) cares about is unlikely to ever be realised because it doesn't generate the kind of groundswell of human effort required to turn a vision into reality.

In the early days of establishing Ōkahukura College we tempered our desires to begin work on the urgently needed curriculum and learning programmes, choosing instead to embark on a community consultation process around our vision and values. This was time-consuming and generated a lot of passionate and spirited discussion amongst the community, but we knew that, without a firm direction from them, any detailed work we undertook on curriculum and learning might be wasted effort. From an inexperienced senior leader's perspective, this visioning work was difficult: standing up at public meetings to explore things that I personally was passionate about but about which members of the community had concerns or a lack of understanding. We took feedback away from these sessions and looked for common ground across the perspectives and commentary. This synthesis of voices—always seeking consensus and common ground—resulted in the development of a set of overarching principles most people in the community felt ownership of. When the visioning work was done and it was time to move to implementation, the importance of this groundwork became clear. When people challenged us on why we were taking the approaches we were, our response was always that we were simply implementing what our community had asked for. The vision and values were our mandate: our solid ground.

We also worked hard to use those stated values and beliefs to guide our decision-making. One of the 10 values we arrived at was collaboration, and as we began to explore the new possibilities innovative learning environments offered us, we spent many hours discussing how we were going to use them. Almost overwhelmed by the options we oscillated, swinging from creating traditional-style classrooms out of room dividers and mobile whiteboards, to using them as primarily open, flexible spaces, then back again. It wasn't until we flipped back through our values documentation that we saw the word *collaboration* staring back at us, and realised what needed to happen: if our values were to have any meaning, we *had* to embrace collaboration, co-teaching, and community in our learning spaces. As Roy Disney is reported to have said: "It's not hard to make decisions when you know what your values are" (Maxwell, 2006, sec. 5.5).

As we developed these 10 organisational values, we realised it wasn't enough to have them filed away in a prospectus; they needed to be part of the everyday language of the school. For that to occur we needed to develop a set of short, snappy statements to make them memorable. Our mantra was, "They'll only catch on if people can exchange them in the corridor or across the photocopier." It was at this point that fate delivered a graphic designer to our door. A local resident who was studying graphic design heard about our new school and approached us to see if we would be her client for her final year portfolio. Happy to support someone in their studies, we were even happier to learn that there would be no charge for this work: she would develop a free set of 10 posters illustrating our values.

The process required us to develop design briefs and (more importantly) the snappy catchphrases for each of the values. One of my favourites remains, “Diversity enriches our learning community”; these five words still trip off my tongue in conversation with others, years after leaving the school. What I learnt through this process was that if an organisation’s vision and values are to be valued and defended universally, they need to trip off the tongue of every member of that organisation. In primary schools, this means five-year-olds (who are still learning to read) need to be able to remember and recall the vision statement: the simpler they are, the better. Principal Dmitri once conceded to me that, while now he’d have it be no longer than a sentence, Mangahuia’s vision statement was a page long in the early days of their development. Despite this, it was widely owned and the whole Mangahuia School community worked hard to make it a reality: “It set the direction quite clearly for us; it gave us power. Because it was the community’s vision statement. We were just working to the vision statement.”

One thing I’ve seen over the years is that pursuing a singular organisational vision often requires leaders to make difficult or unpopular decisions. An example I have seen several times occurs when schools have felt pressured to accommodate parental or community resistance to innovative learning environments by offering parents the option of having their child either in an innovative learning environment or in a traditional classroom. I’ve never been convinced by this approach because it feels like a mixed message. While responding to feedback and parental concerns is important, I’ve always found that the subconscious message this ‘dual track’ approach sends to communities is that the school is not sufficiently committed to the ‘innovative’ approach to argue strongly for it, instead choosing to offer parents the opportunity to opt out if they want to. I wonder which other aspects of school life principals might allow parents to ‘opt out’ of: “gymnasiums can be noisy and cold so my child won’t be doing sports,” or “learning to paint won’t help my child get into medical school so I’d like an alternative programme, thanks”.

Having two alternate visions for the kind of learning you’re hoping to achieve weakens your perceived commitment to either one.

Linked to the past but committed to moving beyond it.

Powerful vision statements are about creating the future rather than reflecting the present. That’s why they’re called ‘visions’, not ‘realities’. But vision statements that don’t at least acknowledge an organisation’s present and past are (counter-intuitively) destined to fail. Canato and colleagues hint at the connection between the past and the future when they observe that new practices are often adopted by "recombining elements of 'templates' that are commonly accepted at the time of adoption" (Canato, Ravasi, & Phillips, 2013, p. 1725). Organisations often build the future from parts lying around in the present.

These links back to the past are important for two reasons: firstly if people think a change initiative is a radical departure from established practice, they will feel a sense of loss and grief for all of the effort put into making that established practice successful; and they will also feel the change is a step change rather than an incremental change (an idea upon which I expand later). The level of congruity between change initiatives and existing practices "is an important predictor" of whether organisations adopt those change initiatives (Love & Cebon, 2008, p. 239). Poor connections with the past (an organisation's existing practices) often leads to delays in the adoption of new practices, particularly in the (all-important) early stages of a change effort, when momentum is particularly important (Love & Cebon, 2008, p. 241).

A number of years ago I was reminded of the importance of ensuring everyone understands the links between a proposed change and the existing values and practices of their organisation. I was working with a school that had been through some difficult times and was now receiving an investment from the Ministry of Education to redevelop their buildings. There was a clear sense of urgency around the change with almost everyone involved understanding that a significant departure from some practices that had occurred in the past was required to breathe new life into the school. However, even in this context, with wide support for the change, one of the teachers raised a hand and asked "How does *E Whiti* fit into this?"

E Whiti was the school's bi-lingual unit and the question reminded me that, even though staff knew a lot of existing practices had to be discarded, there were still things that were precious and had to be preserved in the new order. In fact, in a world where most things were changing; it was particularly important to preserve the few existing practices that *were* working. Doing so honoured the efforts of past staff members, and helped to ensure that the baby wasn't thrown out with the bathwater.

Working from values and beliefs like this doesn't just help to motivate people, it also prevents the emergence of unnecessary resistance. If people are affectively committed to a school, they should (quite rightly) view any departure from the established direction as a loss of what has been achieved over the years, and this sense of loss will probably generate resistance to the change. The notion of loss is central to change; with most initiatives producing people who gain and people who lose, depending on how invested they are in the current order. Importantly—as Aiken and Keller (2009, p. 17) point out—human beings often act as "irrational loss avoiders", behaving in counter-intuitive ways if they believe they might lose something. Ensuring a change is as well-aligned to the past as possible helps to avoid people feeling this sense of loss.

Anchoring change in organisational values and beliefs also helps to ensure participants are not overwhelmed by change. Instead, they should be reminded that, despite the appearance that *everything* is different in an innovative learning environment (walls have been removed, doors have disappeared, new furniture has arrived, different ways of planning have been adopted, and relationships have altered) the most important things remain the same: we haven't thrown out who we are. Our values and beliefs remain strong, and they offer us guidance for how to proceed: it's still about students. Good teaching and learning are still *good teaching and learning*. As Principal Klaus put it, the central motivation through their change process was: "Our why. Our vision. We really believed and were driven by that." And as Principal Dmitri once reminded me: "If you understand your vision, it empowers you. It gives you a lot of freedom."

Align change with individual vision and values

"But what if we don't all have the same values?"

It took me a moment to respond to this question because, if I'm to be honest, I didn't quite know what to say. It came half-way through a staff meeting with a group of teachers on the importance of vision and values: the group were 'ploughing their fields' and 'making their boats go faster'. The teacher's question came out of left field, and was the first time in any of my sessions on vision and values that anyone had questioned the premise upon which the whole workshop was based: that there is a set of values to which all members of a school community subscribe. I stumbled my way through an answer; mentioning something about the organisational values being principles upon which we should all agree and be committed to, but the question wouldn't leave me and I spent several days thinking about it.

Technically my answer was correct: if a school undertakes a wide-ranging and genuine consultation process as they develop (or reaffirm) their organisational values, the final outcome should have the wide approval of, and currency in, the whole school community. The stated vision and values should guide all action in a school, and if a teacher doesn't agree with them, they should probably avoid putting themselves in uncomfortable situations by seeking work elsewhere, in a school that has a set of values more closely aligned to their own.

Pragmatically, however, my answer didn't consider the realpolitik of leading change in schools. It was this tension that I continued to explore in the days and weeks that followed: people in organisations *should* share the same high-level beliefs, but it's not always the case that they *do*. Each of us has different goals and motivators in our lives and careers, and what the teacher was hinting at was that while there might be an overarching vision for a school, each of us also have myriad micro-priorities that we pursue in our jobs; those motivators that probably brought us to teaching in the first place. Talk to any teacher and you'll quickly find out what they are truly passionate about: indigenous education, sustainability, equity, STEM, boys' writing, creativity... The diversity in a group's values is probably only matched by number of people in the room: we all have our own drivers.

When considering the question days later, I came to an insight: these micro-priorities can be both enormously useful and enormously problematic. When an individual's own motivating agenda is aligned with an organisation's values and beliefs they are inclined to contribute discretionary effort to achieve those values—they'll commit to change. However, an individual's micro-priorities might also be in conflict with those of their team-mates leading to division and friction within the team. In this circumstance, leading change is extremely difficult.

To try to make sense of the dynamics at play, I began to explore research related to the connection between an employee's personal values and their level of commitment to change. Atkin defines personal values and beliefs as "the ideals that give significance to our lives, that are reflected through the priorities we choose, and that we act on consistently and repeatedly" (Atkin, 1996, p. 2). What I was interested in exploring was how personal values can affect the adoption of new practices.

Several key threads emerged from this research. Firstly, although collective (organisational) readiness is an important antecedent for the adoption of change, organisations only "accept or reject change through the actions of their members" (Holt, Armenakis, Feild, & Harris, 2007, p. 251). Sussman and Vecchio identify three factors that influence individuals' decisions to adopt new practices:

- internalisation ("the acceptance of influence because it is congruent with a worker's values");
- identification (a desire to "engage in a satisfying role-relationship with another person or a group"); and
- compliance (a desire to "gain specific rewards and to avoid punishments") (Sussmann & Vecchio, 1982, p. 181).

Klein and Sorra explored these influences further, finding that internalisation was the most powerful of the three influences: "commitment to the use of an innovation is a function of the perceived fit of the innovation to employees' values" rather than organisational values (Klein & Sorra, 1996, pp. 1062–1063). Holloway also demonstrated that "it is a belief system, not an economic or empirical warrant, that determines acceptance or success [of a change]" (1996, p. 1110, cited in Luehmann, 2002, p. 11).

Shamir offers a possible explanation for why personal values are more powerful than compliance or identification, observing that an employee's behaviour "is not always [simply] goal-oriented, instrumental and calculative but is also expressive of feelings, attitudes and self-concepts" (Shamir, 1991, p. 411). Shamir suggests human beings often seek out work roles that allow them to behave in a way that expresses values, beliefs and self-concepts: work that allows us to enact our micro-priorities. When teachers adopt a new practice that aligns with elements of their personality and which advances their personal mission, it's a form of self-expression. I saw how powerfully values can shape people's behaviour when a leader with whom I was working had a "Road to Damascus" moment.

The Road to Damascus

Working with a school on a major rebuild and transition into ILEs, one afternoon I had back-to-back meetings and had to dash from one to another. The first was with the leadership team and administrators poring over plans, the second with a teaching team who were planning their transition into the spaces once they were built. Heading into the second meeting, I opened the door and apologised for being a few minutes late. Scanning the room, I felt my heart sink. For the third session in a row, the team leader wasn't in the room.

I'd struggled to engage this particular leader. He was a senior leader: a well-respected member of the overall leadership team with a long history of courageous activity in the school and community. I knew that if he wasn't committed to the change the school was embarking upon, the community would be aware of it, and, taking their cues from this leader, others would question the path the school was on. I knew that without the leader on board, the change was going to be difficult to see through.

His absence was part of a wider pattern of disengaged behaviour: he would rarely turn up to our sessions, preferring instead to delegate to members of his team, in doing so making it clear he had more important things to do. When he did attend meetings, his participation was perfunctory and reluctant: he was surly, distracted and often openly dismissive when he did participate. I struggled to see how I was going to turn things around.

Two months later I sat in the principal's office discussing an unrelated matter when he stopped me and announced that the leader in question had had a "*Road to Damascus*" moment and was now completely on board. Taken aback, I asked the principal to tell me more. What had led to the about-face? The principal explained that the leader—who was passionate about the achievement of Māori students—happened to have an opportunity to spend some time working with a nationally regarded principal who was an expert in indigenous education. This expert was also the leader of a school with innovative learning environment facilities, and was an advocate for the role they could play in improving educational outcomes for Māori.

Reflecting on what had made the difference for the leader, I realised an essential element that was missing for him was a connection between the new approach and his own values. Once that connection was in place, he began to embrace the change. I also reflected that, without a chance meeting with the nationally recognised expert, the leader in question may not have had his Road to Damascus moment. The fact that the turning point occurred more because of good luck than good management did not sit well with me. Simply hoping that all teachers have their own Road to Damascus moment is not a wise approach to leadership because, as is often observed, 'Hope is not a strategy.'

The key challenge I saw was to find a process that ensures a change is aligned with both organisational values and those of the individuals involved. On one hand, a rigid 'top down' approach is unlikely to be successful ("These are our values; we're doing it this way"), but neither will an approach that arrives at 'decision by committee' where everyone's pet project is bolted onto the change initiative, creating some kind of Frankenstein that tries to move in several different directions simultaneously.

Arguably this kind of 'Frankenstein School' is possible in New Zealand given the country's decentralised education system. Each school is governed by an autonomous, community-elected Board of Trustees, and the New Zealand Curriculum (NZC) provides an open framework for schools to develop their own localised curriculum. Rather than prescribing learning, the NZC seeks "to provide guidance for schools as they design and review their curriculum" (New Zealand Ministry of Education, 2007, p. 6). This governance and curriculum flexibility offers schools the potential to create highly personalised and relevant learning for students, it can also makes it possible for teachers to enact their own (idiosyncratic) version of the curriculum, based on their personal values and interests. Principal Klaus once described the situation at Mangahuia like this:

> We have single cell environments where people working in isolation and in the best way we defined it was: we had 11 corner dairies[3] all operating pretty well. They were great little dairies but they were selling their own product. And so it lacked coherence and we thought, "We can do better than this."

Central to the challenge of aligning change with individual values and beliefs for Klaus and me was the process of bringing together these disparate class cultures (or corner dairies). We knew that the greater the degree of alignment between individual teacher values; their colleagues' values; and the school's vision and values, the greater the likelihood those teams would engage with the change vision and work together to achieve it.

A related challenge is the fact that, even when people share a common set of values, they can go about enacting those values in quite different ways in the classroom. For instance, teachers can build learner independence by having students complete activities individually or in groups: neither approach is *wrong* necessarily. Yet the possibility exists—when two practitioners come together in a collaborative learning environment—that friction between them might develop if each views their own practice as the single *right* way to doing things.

It slowly dawned on me the challenge in this work was three-fold.

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3 A *dairy* is the New Zealand term used to refer to a corner store or local shop.

- The change initiative needs to be grounded in the organisation's vision and values, which in turn need to have valence with participants' values.
- The members of the newly formed collaborative teams need to have a shared set of values which are enacted in their practice.
- Team members also need to understand that, due to individual teachers' styles and strengths, there are different ways to enact these values.

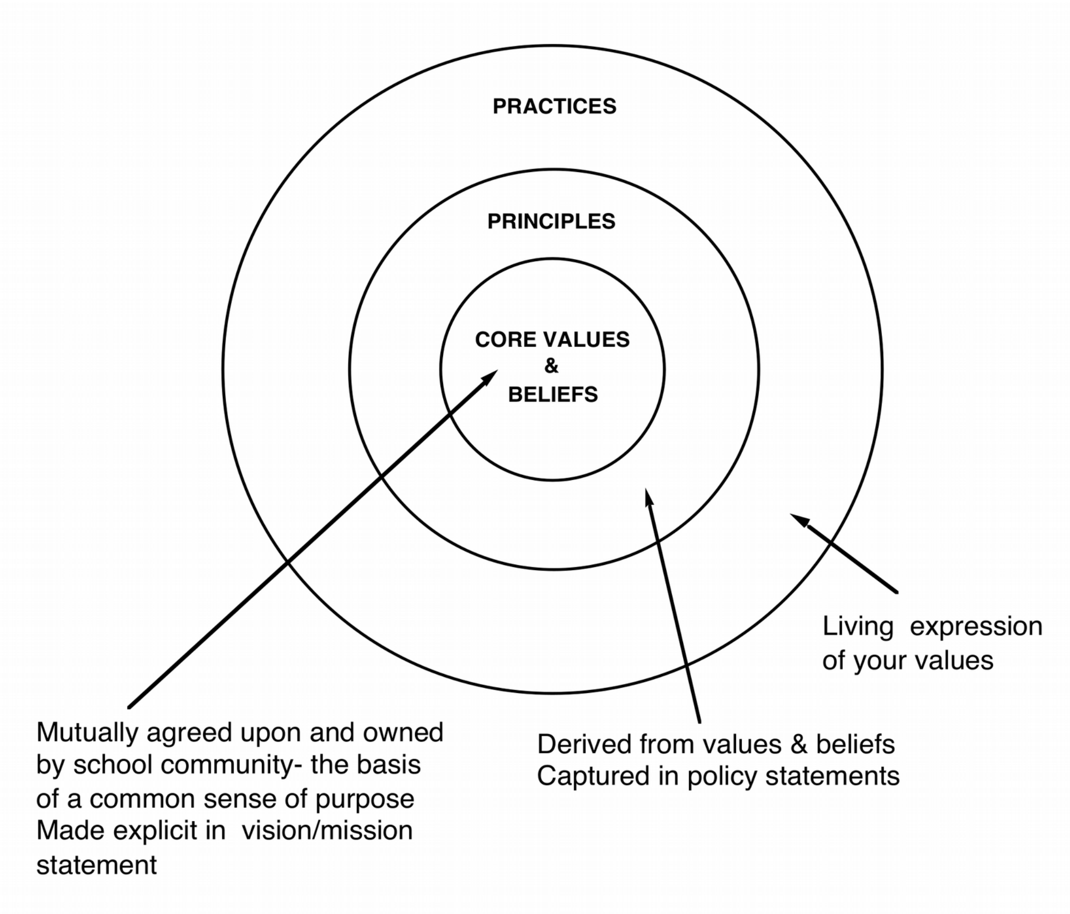

Figure 3.2: the 'golden circle' (Atkin, 1996)

Looking for an approach that would ensure all three of these challenges were addressed, I began to use a facilitation tool known as the *golden* circle (Figure 3.2). Originally described by Julia Atkin in 1996, the three concentric-circle tool gained its now well-known title after Simon Sinek described it in a TED talk which became a viral sensation (Sinek, 2009). At the centre of the golden circle is what Atkin refers to as an organisation's values and beliefs, or their "educative purpose" (Atkin, 1996, p. 10). This is variously referred to as 'the why'; the reason your organisation exists; or the 'superordinate goal' of your organisation. The middle circle contains a set of commonly agreed-to principles that guide people's actions and shape decision-making: 'the *how*'. These are the principles without which the superordinate goal will not be achieved or will be achieved superficially but without passion and commitment (Atkin, 1996, p. 2).

Examples of statements that might be made in the 'how' circle include 'we promote *collaboration*', 'we promote *inclusion*', 'we promote *differentiation*' acting as guidance for decision-making. The outer circle contains the concrete practices in which practitioners engage in, based on the guiding principles, commonly referred to as 'the what'. Examples of practices might include using self- and peer-assessment rubrics, play-based learning, student-led inquiries or group-based activities. When leaders including Principal Klaus refer to the importance of 'going back to the why', they are referring to the process of ensuring the practices occurring in the outer circle are closely aligned to the superordinate goal in the inner circle.

The golden circle tool is now so central to my work in schools that if the leadership have never heard of it, or they have not updated it in some time it's one of the first activities I undertake with them. Table 3.1 contains a transcript of a typical 'golden circle' workshop.

Table 3.1.

Golden Circle Workshop Transcript

Facilitator's instruction:	***Outcome:***
"Okay people, working in your teaching teams, I'd like you to draw up your golden circle and put the school vision in the bullseye—right in the centre. That's our target; that's what we're aiming for. [Pause] Who can remember the school vision statement? Hands up if you can! It's written on the wall over reception so you should be able to remember it. Okay, someone who *can* remember it, can you please put the who are currently Googling it out of their misery please?" [Laughter]	*Participants—even those who are new to the school —are aware of the 'superordinate' goal that should be guiding all activity in the school: the vision statement.*
"If we're going to achieve that vision—to hit our bullseye—we can just cross our fingers and hope; or we can be a bit more deliberate about it, identifying a set of strategies we're going to employ consistently and coherently. These are the 'how' in the process. Using the sentence starters 'We promote...' or 'We prioritise...' what are the principles with which you all agree, and without	*Participants discuss the values and principles each of them holds: converting tacit knowledge to explicit knowledge[4].* *Participants identify the values they have in common*

4 Explicit knowledge is that which can be "easily communicated and shared" while tacit knowledge is that which is "highly personal and hard to formalise" (Nonaka, 1991, p. 165).

which you won't achieve your bullseye?"	*with each other.*
"Right, now we've got our guiding principles, it's time to turn them into concrete practice in the classroom. If you said 'We value collaboration,' how does your classroom practice support that principle? If you separate all the chairs and tables so kids can't talk to each other, your practice doesn't support the principle of collaboration. You see how it works? Another principle might be 'We promote connections with family' and you call home once a term, send regular emails and have an open afternoon one day a week: those practices all support the principle. Two things to look out for here: any principles that aren't well supported by practices, and any practices you currently employ that don't have strong links through the principles to the vision."	*Participants evaluate how well i) they are implementing each of the guiding principles, and ii) which of the practices they currently employ don't align with their stated values and guiding principles.* *Participants understand there is more than one way to implement a guiding principle through classroom practice.*
"Now we've developed our golden circles, I've got one final question: How much alignment do you think there is between what you've written on your sheets and what's written on other teams' sheets? How much confidence do you have that a student moving through year levels will have a reasonably coherent experience? What I want you to do now is share your golden circle with another team. First of all, look for similarities and differences, then discuss what you find."	*Teams reflect on how coherent their principles and practices are with the learning occurring elsewhere in the school.*

By engaging these kinds of facilitated *values surfacing* processes, leaders can offer teachers opportunities to ensure new strategies (or learning environments) are implemented in ways that are both aligned with individual and school values and beliefs, and in ways that are flexible enough to accommodate individual teacher strengths and styles.

3.3.2 Use participatory decision-making processes

One of the most common adages regarding change is that it's rarely successful when it's *done to* someone. Another adage is "people don't resist change; they resist *being changed*" (Senge et al., 1999, p. 14). Both of these aphorisms are based on the same persistent principle: an externally imposed change leads not only to increased levels of resistance, but also to increased "negative emotional reactions, such as anxiety, anger and fear" (Oreg, 2006, p. 77). While change leaders might note that the most successful change initiatives emerge organically out of an organisation, they're often all too aware it's impossible to avoid externally mandated change, given organisations don't exist in vacuums.

In New Zealand, the development of innovative learning environments can be seen as an example of externally mandated change: the Ministry of Education's New Zealand School Property Strategy and the 2011 Christchurch earthquakes were both forces that originated outside of individual schools. There are, however, approaches that school leaders can take to increase the sense of ownership and control participants feels over a change initiative, even when that initiative originates outside their organisation. Researchers such as Devos and colleagues have shown that, when employees experience high levels of participation in substantive change processes such as planning, decision making, and training, those initiatives are more likely to be successful, even when they are externally mandated (Devos, Vanderheyden, & Van den Broeck, 2002, p. 10).

In line with the observation of Meyer et al. (2007), "employee commitment is a key to the successful implementation of organizational change" (p. 209), a range of researchers point to the ongoing importance of employing participatory engagement and decision-making processes in order to increase participants' psychological commitment to a change, and therefore the likelihood that change will be successful. Gislason for example suggests that a key antecedent for successful implementation of open plan environments is the degree to which teachers "are committed to developing these practices in the first place" (Gislason, 2009, p. 18).

Holt et al. also found that "participation is generally believed to increase the acceptance of proposed changes," (Holt et al., 2007, p. 245) partly because people who participate in planning and implementing change often have the opportunity to influence that change. Kotter and Schlesinger also recommend initiators of change should "listen to the people the change involves and use their advice" in order to avoid potential resistance (Kotter & Schlesinger, 2008, p. 5).

The importance of stakeholder participation is one of the few principles to emerge from the scant research related specifically to how to lead change when implementing innovative learning environments. Blackmore and colleagues found that when "educational systems listen to and work with children and teachers [on the design of facilities] they can transform both learning spaces and pedagogical approaches" (Blackmore, Bateman, Loughlin et al. 2011, p. 37). This kind of on-going, participation in the design process (what Blackmore et al. refer to as "serial redesign" (Blackmore, Bateman, Cloonan et al., 2011, p. 13)) leads to the avoidance of negative teacher orientation to new spaces as well as increased feelings of those teachers feeling valued for their opinions (Blackmore, Bateman, Loughlin et al., 2011, p. 10).

Other researchers cite increased motivation among teachers (Higgins, Hall, Wall, Woolner, & McCaughey, 2005, p. 37), and improved teacher practices which in turn benefit students' learning experiences (Temple, 2007; Higgins et al., 2005; Fisher, 2002 cited in Blackmore, Bateman, Loughlin, et al., 2011). As Higgins et al. note, while further research is required, there is an implication in many studies that:

> The empowering process of re-designing and taking ownership would spill over into motivation and empowerment in other areas, encouraging creativity and experimentation in the curriculum, raising motivation towards academic and social goals. (Higgins et al., 2005, p. 37)

Many of the benefits outlined above are linked to the increased sense of ownership that people feel when they are invited to participate in a change. Aiken and Keller refer to this as letting employees "write their own story", noting that:

> When employees choose for themselves (as opposed to being told), they are more committed to the outcome by a factor of almost five to one. (Aiken & Keller, 2009, sec. Introduction)

Closely related to this persistent preference for a sense of ownership when participating in change is the well-studied observation that humans often prefer to be in control of situations that relate to them (Samuelson & Zeckhauser, 1988, p. 40). When creating space for people to help 'write the story' I use the metaphor of the blank piece of paper. There's an adage that a blank piece of paper can be daunting when one is trying to generate ideas. Leaders may feel that in order to avoid the paralysis of the blank page, they should bring a fully developed plan to the team. This approach commits the opposite sin. Instead of a blank page, participants may be confronted with a colour-printed, laminated, spiral-bound change management plan that often *decreases* their commitment to that plan. A teacher who sees that a leader has spent weeks or months working on a change plan won't feel as free to critique that plan or as creative in their exploration of alternatives as if the leader came to them with a rough sketch of how it might work, and handed the teacher the pencil. There's no escaping the power imbalance at play in these situations, and the teacher will always be aware that it's possible the leader will feel the sting of criticism and react badly if suggestions differ drastically from the leader's plan, or require the plan to be scrapped. Similarly, the teacher won't feel a commitment to the plan because it's not theirs—it's the leader's. They can't see their contribution to it, or their words in the language of it.

Opportunities to participate do create ownership but they also represent an opportunity for teachers to draw the values present at the centre of the golden circle out to the edge; into the classroom. Principal Klaus was conscious of having these conversations with the staff regularly:

> I would say: here is our charter; here are our goals. But this is your charter as much as mine. How we going with things? What are the challenges we're facing? How do we address it as a school? Because I [the principal] have only got one lens.

Klaus's allusion to different lenses hints at the role every team member can play in improving a change initiative: everyone sees a different facet of the challenge and can not only bring important perspectives, but also improve their own sense of commitment to the change in doing so.

Chawla and Kelloway also found that increased participation during a large-scale change intervention (which reflected higher levels of employee affective commitment to change) also increased trust in management (Chawla & Kelloway, 2004, p. 494). As Principal Klaus and I worked with some of his team (who in some cases weren't accustomed to being involved in decision-making) we persisted because we knew their participation was important. When one of the team asked "Why are we being involved in this?" Klaus's response was "Because it's really important to us."

Langer's famous lottery experiment (Langer, 1983, pp. 68–72) demonstrates how important it is for human beings to be given control over situations that affect them. Langer's experiment involved researchers attempting to buy back tickets from participants just before the winning number in a lottery is drawn. Participants who chose their own cards wanted on average four times the amount participants who had been allocated their cards randomly were happy to settle for. Langer's argument is that this bias stemmed from the illusion of control people felt when they participating in choosing their card (Samuelson & Zeckhauser, 1988, p. 40).

Providing people with the opportunity to participate in decision-making (at a substantive level, beyond choosing arbitrary elements like lottery numbers) is essential in change, but just it is just as essential to ensure people are aware of the impact their participation has had. Principal Vikram tells the story of staff members who gave feedback on the designs for a classroom redesign which led to significant changes in the design. Not content with simply knowing the final design had been improved, Vikram sought out those teachers to ensure they knew it was their contribution that led to the improvements. He said to the group, “Hey listen remember you mentioned in that meeting... about music. I’ve listened to that. This is what we’re going to do.” Vikram said the result was obvious: “And their eyes lit up.” In his own words, what Vikram was saying was, “You’ve been heard.” The most important thing is that people know their participation made a difference; they were listened to, their opinion mattered. The point Vikram made to me was that people may not realise the level of control and influence they have until it is actually pointed out to them.

Mangahuia School took pride in the level of ownership and control they retained over the process of developing their new environments. The *origin stor*y they tell for their learning environment journey is of two teachers who opened the sliding doors between their classrooms for a meeting, then chose not to close them afterwards. Even though other schools were beginning to explore the potential of the physical environment to enhance learning opportunities, Mangahuia kept reminding themselves of their origin story. Principal Dmitri said “It wasn’t a fashion trend... We stumbled into it because two doors were left open. And so that’s the story we keep telling.” The origin story reminded everyone in the community of the level of control and participation they had over the change, right from the beginning.

Parental participation in the change process turned out to be equally important. One of the early adopters of innovative learning environments in New Zealand was a high-performing school with a very well-educated, articulate and engaged community. I was invited to present to that community in the form of a ‘town hall-style’ meeting. The audience were a little unenthusiastic (if not downright stony-faced) during my energetic, well-polished ‘ILEs for Parents’ presentation but they really came to life as we got into the question and answer segment of the session. The majority of the audience weren’t interested in any of the research, or to argue the case for or against collaboration or flexible environments; in fact they weren’t even interested in hearing from me as the visiting expert at all. What they *were* interested in was asking pointed questions of the principal, questions which really served as barbed assertions of how much they disapproved of the limited amount of consultation he had undertaken with parents, and of the decisions that had been made without them. They were not necessarily upset with *what* had happened, they were upset with *how* it had happened. The lesson I took away from that night was: big decisions made without the participation of your parent community are done at your peril.

Having worked with the school subsequently, it was pleasing to see that the community were thoroughly behind the changes being made and the school has continued the transformation of its spaces with the full support of parents. It took a painful, public acknowledgement by the principal that he had gotten things wrong, but he took the criticism on the chin, was honest about his missteps and increased the number of participation opportunities parents had available to them.

Another reason active participation is important is that it increases the quality of decision-making in a change process. McKay et al. note that increasing the number and range of people who participate in designing a change process often provides those leading the change with “valuable information that can assist with change-related decision-making” (McKay, Kuntz, & Näswall, 2013, p. 30). When participation is based “genuinely on the development of shared understandings of all those involved” (Woolner, McCarter, Wall, & Higgins, 2012, p. 17) change is more likely to “flow through a system” and be sustained.

Principal Dmitri designed a process that offered participation opportunities to parents and whānau, going as far as closing the school one Friday so busloads of families could travel to two schools that had already implemented innovative learning environments. The experience was designed to give families more information about ILEs by seeing them in action, and Dmitri was confident that the visits would generate a mandate to proceed from the parents. While the visit did achieve this outcome, it didn’t happen the way Dmitri expected.

In one school, staff, parents and students heard an articulate vision for the way the environments supported teacher and student collaboration, and this vision was evident in practice as the groups visited various teams throughout the school. In the second school, a deputy principal also articulated a vision for the kind of collaborative learning the parents and teachers might see in the learning spaces, but as the visitors moved through these spaces, they saw door after door pulled closed, suggesting teaching was primarily in *the paradigm of one* and not collaborative despite the opportunities provided by the building.

These two visits, designed to showcase two examples of ILEs working well, inadvertently offered parents one successful and one unsuccessful example. Rather than confusing parents or sowing seeds of doubt in their minds, Dmitri was surprised to learn that the contrasting experiences had the effect of redoubling the community's resolve to go ahead with the building development, with parents keen to learn lessons not only about what had worked, but also about what hadn't worked from the two examples they had seen on the day. The contrast offered by the successful and relatively unsuccessful implementations caused people to start to ask questions like, "What made the difference?" and "Were there crucial decisions that one school made but the other didn't?" Principal Dmitri found himself wondering aloud to his teachers and parents:

> If it's not as simple as just opening up walls, how can we ensure our development is successful rather than unsuccessful?

While the trip might not have provided many answers, it certainly gave everyone plenty of questions to explore, which ultimately led to deep reflection and an improvement in the quality of the school's decision-making.

The school visits also demonstrated to Dmitri and me the capability this kind of participation has to generate affective commitment to a change initiative. Following the trip away, the school announced it had commissioned an architecture firm to draw up some concept plans for the school. Dmitri was pleasantly surprised by the reaction of the parents: "the parent group that went off to [the school visit]. They couldn't wait for the plans to come back. They were so keen to get those plans back and see them."

The ultimate benefit of Dmitri's participatory approach was that by the end of 2013, the teaching staff themselves made the decision to proceed with collaborative environments; it wasn't a leadership decision at all.

When good participation goes bad

"I'm sorry, I just can't hear you. Can you speak up please?" The rain on the old library's tin roof is almost deafening; the poor acoustics not helping matters. I'm trying to answer questions at the end of a parent information session at a school embarking on a major ILE development. The session has become a bit testy with several members of the audience trying to dominate the floor to get their points across.

The parent with the question-that's-more-of-a-comment obliges by shouting her concerns that, "These new buildings are just an experiment that's being foisted on our community by the Ministry of Education! Where's the research? How do you know they're not going to be a disaster and you'll be putting walls up in six months' time? This is our kids' education we're talking about here!"

"How did we get here?" I kept thinking. "We'd planned this so well."

Just the previous day the team had met in the principal's office: representatives from the school, the architecture firm, the Ministry of Education, acoustic engineers and an education consultant (me) representing the research side of the equation. The school had surveyed the community around what their concerns were: the whole idea of open spaces was new; students might be distracted with other classes happening around them; there might be some issues with noise. We'd carefully considered how we would address each of the concerns, with the central thread being that the design didn't represent a radical change for this school because it was a school that already had an innovative approach to learning with a proven track record of being high-performing across the curriculum. This development represented the opportunity to align the physical environments with the dynamic teaching and learning that was already taking place in the school. So far, so good.

On the night the irony of the concerns about acoustics was not lost on me: as I struggled to hear a lot of what was being said over the din of the rain on the roof, I was reminded that many of our existing buildings have very poor acoustic performance. That aside, I'd been prepared for a wide range of opinions on the new building: in a diverse community there are bound to be a variety of perspectives on any topic. What I was less prepared for was the way the more agitated parents dominated the conversation: interjecting while speakers were answering questions; engaging in extended one-on-one sparring with panel members to the point where other parents eventually gave up and put their hands down, leaving their questions unasked.

Driving away from the session I reflected on what had taken place. I felt a strange mix of emotions because I didn't feel that I had been attacked personally: my part in the presentation had been received (I thought) well; it was only when the floor opened for questions that things had gotten testy. I kept asking myself, "What could we have done differently?"

Pulling into my driveway and walking to the front door, I was thankful the rain had stopped. Inside, I dropped my bag and went to reheat my dinner. As I ate it at the kitchen counter, I told my wife about the session and what had made it so difficult.

It wasn't until I checked my emails the following day that I had some clarity over what had happened. The chair of the school's board of trustees had emailed the panel to thank them for their contribution, and to say that she'd been overwhelmed with positive feedback from literally dozens of parents who had attended, many of whom felt they couldn't speak up during on the night but who still wanted to make their opinions known.

- "I am confident that this will be an inspirational learning environment for teachers and students alike."
- "Many, many parents excited by the changes happening at [this school]."
- "I congratulate you all on sticking to a forward thinking, research based proposal and I look forward to being part of it with my children."

Thinking about this large group who, while remaining silent on the night, still deserved to have their perspectives acknowledged, I reflected on our facilitation of the evening. This kind of town-hall style event prioritises the opinions of people who are comfortable in a high-stakes public forum, essentially silencing those who aren't as confident in public. In hindsight it would have been better if people had had the opportunity first to hear from experts, before discussing their ideas and questions in small groups or around sheets of paper. The ideas that emerged could then be shared back with the larger group rather offering people an alternative to a *loudest-voice-wins* town-hall style meeting. What I realised was that it's not enough simply to plan for participation, that plan needs to be designed to generate positive participation, or a type of engagement that allows for both the quietest as well as the loudest voices to be heard.

As the town-hall meeting revealed to me, fostering wide engagement with a change process can help with problem-finding, but participatory decision-making processes can also help with problem-*solving*. I saw this at Mangahuia School when Principal Dmitri undertook an activity with his staff designed to accelerate their ability to solve problems related to the implementation of their innovative learning environments. During a staff meeting Dmitri arranged large pieces of paper around the room and invited staff to spend 30 seconds working on each sheet. His instruction was, "You're got an open chequebook: what do you want learning to be? You can support it with any resource." It was an invitation for teachers to engage in blue-sky thinking, unconstrained by traditional restrictions such as budget and resourcing. After about 10 to 15 minutes of brainstorming he collected the sheets on which the staff had been writing and said "Okay, I've got all this. Thanks for that." The next day he repeated the session, but this time he said:

> Same question, but you can't repeat what you said yesterday. Pull out the references to computers and all of that. Only money can change those things. Focus on what you want *learning* to be. What's *learning* going to look like?

The staff then started writing down blue-sky thoughts related to learning, and how learning might look if their dreams came true. After the session, Dmitri collated all the data then presented it back to the staff, saying:

> If we had the money these [computers etc.] are the "nice to haves", but we don't have the money. We can't make a difference there. But here's the learning: this is what we *can* make a difference on.

What Dmitri had revealed to his staff was that some of the barriers they had in their heads were genuine barriers relating to resourcing, but other barriers were purely imaginary. If people wanted to take the afternoon off and go down to the river to explore ecosystems they could. If they wanted to spend all day with their students being artists they could. If they wanted to teach collaboratively even though they were in two separate classrooms they could. At the end of the session that staff could see that a lot of the barriers they perceived to be in place were in fact put in place, not by leadership or a lack of resourcing, but by the teachers' own mind-frames.

Throughout this process, Principal Dmitri saw one of his key roles as being the creation of a climate conducive to staff seeing possibilities and feeling empowered to achieve those possibilities. His engagement and participation activities became about provoking his staff to explore the kind of change they wanted to see in their own classrooms, and asking them "What's stopping you? I certainly aren't."

Watching Dmitri's process unfold, I saw three benefits from his participatory approach to decision-making.

- Staff felt invested in the process: they had ownership rather than just buy-in because *they* were the ones who made the decision. Most teams chose to undertake some form of co-teaching.
- Because all teams felt empowered to make changes in their own classrooms,

there wasn't a need to move teachers around to create prototype teams. This level of team continuity made the change more manageable. While other school principals often talk about having to move staff who couldn't work together, at Mangahuia School, this wasn't the case.

- As a result of this continuity, trust between team members was higher which meant they were more able to resolve difficult challenges than if they had been put into teams with new team members.

3.3.3 Ensure change offers benefits to all

I'm on stage in the ballroom of a central Auckland hotel; 200 senior leaders from intermediate and middle schools from around the country are seated at round tables across the room. My slides are projected behind me onto three huge screens and I'm about to deliver a line that gets a laugh from the audience every time:

> You know, it's quite common to hear people say that human beings don't like change, but that's not entirely true [pause for effect.] For example if you won $10 million in the lottery, would you rip up the ticket and say "I don't like change"? No. Some change we're more than happy to enter into, including winning the lottery.

True to form, laughter breaks out across the room confirming that, no, most people wouldn't rip up their winning lottery tickets. I'm borrowing this example from Heifetz, Grashow, and Linsky (2009, p. 22), and it's a great way to make an important point about change: contrary to popular belief, most people are not afraid of change *per se*. Most people are happy to enter into a change that benefits them; it's change that represents *loss* that most people try to avoid.

Not only does this observation turn one of the most common truisms about change on its head, it also acts as a window into an even more fascinating observation about a persistent principle of human behaviour: when faced with change, most people will not only seek to avoid incurring losses on behalf of themselves, they'll also act to ensure *those around them* don't incur losses as well.

Aiken and Keller suggest that "employees will go against their own self-interest if the situation violates other notions they have about fairness and justice" (Aiken & Keller, 2009, p. 11). In other words, if people feel that others have been treated inequitably, they may choose to withdraw their support for a change effort in solidarity with those being mistreated. The example Aiken and Keller give is of a bank that introduced potentially lucrative incentives for employees who sold products that were unfair to customers. The case study demonstrated that a significant number of bankers bad-mouthed their own bank's policy to customers and used price over-rides to show good faith to customers, potentially putting themselves at risk of disciplinary measures as a result of their actions. In schools, an equivalent scenario would be a teacher being asked to implement a practice that made their job easier but which had a negative impact on student learning. Most teachers, myself included, would probably resist such practices.

Aiken and Keller, among others, show that, for a change to be successful:

- on balance, it should represent net benefit rather than loss for participants; and
- those benefits should extend beyond individuals to the wider community.

In order to help people see that innovative learning environments can offer benefits to people other than just the teachers themselves, I developed a workshop activity that uses the concept of *persona*—borrowed from the approach web developers often take when developing accessible websites (US Dept of Health and Human Services, 2019). To ensure teachers consider how the needs of *all* students might be accommodated through the design and implementation of an ILE, when I run the activity with teachers I allocate each teacher a particular persona and ask that they advocate for design choices that would specifically benefit the persona they have been assigned. If a wall is removed and that negatively impacts on what the student on a teacher's persona card is able to achieve in their learning, then that teacher should speak against that design choice.

The activity was so successful that one staff meeting (during which I had planned to use the activity as a warm-up) had to be rescheduled because the group were so engrossed in it. The care with which these teachers considered the impact of even the smallest environmental adjustments showed that they took the avoidance of losses for their students very seriously.

Each of the persona cards contains student voice and a reflective questions, some of which are outlined in Table 3.2.

Table 3.2.

Persona Card Examples

Student persona voice:	**Sample reflective question:**
"I prefer to learn in a group."	Does the space offer opportunities for

	students who prefer to learn collaboratively?
"I'm a bit of a performer. I love to share what I've done with an audience."	Does the space provide opportunities for drama, dance and music as forms of expressing learning?
"I was bullied last year by a student in this class and I'm worried it'll happen again."	Does the environment have any 'unobserved spaces' that might hide antisocial or bullying behaviour?
"I worry about people going into my bag and taking my things."	Does the environment remove stress and anxiety from learning by having well-supervised areas for students' personal items?
"I fidget and bounce around in my seat quite a bit."	Does the environment provide opportunities for students to move, stand, walk, rock or bounce if they want to?
"When I'm writing I need quiet."	Does the environment have a range of acoustic zones including spaces for students to undertake quiet, focused activities?
"I move through activities pretty quickly. I like to access extension materials."	Does the environment extend high-achieving students by providing them ongoing challenge?
"Sometimes the classroom is a bit full on and I feel overwhelmed."	Does the environment have 'low stimulus zones' for student who experience sensory overload?
"I like building and making things."	Does the environment offer materials and spaces to support those who like physical, active learning experiences?
"I love seeing my learning up on the wall and show it to my parents when they come in."	Does the environment have space for display and celebration of learning to increase confidence and a sense of belonging?

The sample reflective questions outlined in Table 3.2 are designed to help teachers think about whether the environments they are designing will meet the needs of *all* learners (and therefore provide benefits to all) not just for those students who benefit from the educational environment as it currently exists.

Principal Vikram reminded me that being aware of the benefits of a change can shape the attitudes, not only of teachers, but of parents as well. Well into Pukeiti School's transition into ILEs Vikram had two parents arrive to enrol their child. They had heard about the innovative learning approach the school was taking and confessed to having some reservations. Rather than trying to convince them of the merits of the school's approach inside his office, Vikram asked if they could spare 10 minutes and took them on a tour of the school's learning spaces. As Vikram relayed to me:

> I said look we'll go for a wander and we'll have a look at what happens at [Pukeiti] on a Friday. When we walked around and there are kids everywhere in the school: kids in here dancing, cooking, doing whatever they were; there were teachers everywhere. When we went up to the juniors all the doors were open and kids were actively engaged in activities along four classrooms... and [the parents] were just blown away. Some of [the students] had been one week at school and some six months. And [the parents] were going: "Holy heck. Look at this!"

What Vikram saw in the parents was an understanding that the school's approach could offer their child a demonstrable benefit as a result of the engaging and enriching curriculum experiences the school provided.

Vikram was also aware of the importance of ensuring teachers were reminded of the benefits the new environments offered, particularly when it came to collaboration:

> I wanted to get teachers away from a lonely occupation. I wanted to get strengths shared. When I looked at Pukeiti I saw very good examples of teaching in some rooms. But teachers not being able to get a chance to see that led me to think we need to be able to share that better.

Turning *the lonely profession* into a collaborative one was central to Principal Vikram's vision for the school's innovative learning environments. In his mind the 'benefit to all' was that teaching practice could come out from behind closed doors. Once it was public, others could critique it, celebrate it and learn from it; it was a perfect example of how a change can offer benefits to all.

I've also worked in schools where the benefits of a change were not apparent to all, and where momentum for change suffered as a result. During a staff meeting at one such school, teachers and I were exploring how we might address aspects of parental resistance to their innovative learning environment implementation. As I listened to the contributions of different staff members around the room, the teacher next to me leaned over and said quietly, "It's not the *parents* I think we need to worry about." I wasn't quite sure how to respond while the wider discussion was occurring, but I made sure I stopped the teacher after the meeting and asked her exactly what she meant.

She said that a few of the teachers had significant reservations about the project and would confess these reservations to parents, undermining the work of the teachers and leaders who were committed to the initiative. As we discussed why this was and what it meant for the school, I came to two realisations: firstly the actions of some staff were undermining the efforts of leaders to assuage parental anxiety, and secondly more work was required with staff to both clarify the intended benefits of the new approach, and to share evidence that those benefits were, in fact, being realised.

3.3.4 Ensure change is incremental

After a one-day conference at which we'd both presented, I shared an elevator ride with Ludwig, a school principal friend of mine. We were talking about our respective sessions and whether we felt they'd gone well when he turned to me and said, "You know Mark, that session you did with my staff years ago was one of the best professional learning days I've ever had." Taken aback, I waited for him to elaborate. "It was that one about The Race to the Pole."

While I was flattered he thought the session was so good, I also knew that he didn't consider the session successful because of my wit, charm and facilitation style. The real reason he'd found it so memorable was the strength of the story I'd use to structure the day. I'd used a chapter of Jim Collins' book *Great by Choice* (Collins & Hansen, 2011, Chapter 3), to link the various professional learning activities together. The section of Collins' book in question tells the story of how Roald Amundsen became the first person to reach the South Pole. I wove many of my important points around that narrative, returning to expand on the story at points across the day. One of the key factors to which Collins attributes Amundsen's success is the principle of the incremental '20 mile march'.

During that full-day session with Ludwig's staff, we had engaged in a range of activities that helped them reflect on their practice and set goals for things they wanted to improve. I have clear memories of that day: reading sections of the book to the staff like a storyteller. The idea to which I returned, time after time over the course of the day, was that in good weather and in bad, Amundsen and his team maintained a strict 20 mile target, careful to make progress even when conditions were poor, and also not to go too far when conditions were fair. Collins notes that Amundsen was careful to keep his people back from "the red line of exhaustion" (Collins & Hansen, 2011, p. 61), and it was this idea that grabbed me while reading the book. It was obviously compelling for Ludwig as well. Incremental change (the 20 mile march) is beneficial for two essential reasons.

- 20 mile marches build the confidence a team has in themselves: “If we did 20 miles during those tough times, we should be able to make progress now.” The more a team is able to maintain steady progress the more they can say they (and not external factors like the weather) are in control of the situation. They never blame circumstance; and they never blame the environment.
- Daily 20 mile marches ensure teams have both the fitness and the reserves needed for trying times. Going too far too soon exhausts people which can have severe consequences even during times of relative stability.

The message with which Ludwig connected during my session was that when a team is going through change, it’s essential they view *themselves* as the engine of progress rather than a group who are at the mercy of external factors. To quote Collins and Hansen:

> Family socio-economic status is out of your control. [Government policy] is out of your control. [Funding] is out of your control. [Technological change] is out of your control. But when you 20 mile march, you have a tangible point of focus that keeps you and your team moving forward, despite confusion, uncertainty, and even chaos. (Collins & Hansen, 2011, p. 62)

Given the way the New Zealand Ministry of Education drip-feeds funding for school property development in five-year increments (New Zealand Ministry of Education, 2020), it’s rare that a school can completely redevelop their entire physical environment in one go. Schools are therefore obliged to engage in 20 mile marches rather than making giant leaps. Nevertheless when Mangahuia School was able to convert most of their traditional classrooms into innovative learning environments over a single summer break, Principal Dmitri was careful to use a 20 mile march approach. Over a 12-month period (and well ahead of the building work beginning) two teachers took the lead and prototyped a range of different approaches to co-teaching, sharing the lessons they learnt with the wider staff. Others were therefore able to get their heads around the nature of the change (and its potential pitfalls and benefits) well before actually stepping into those environments themselves.

Principal Dmitri was also careful to point out that the teaching and learning model they planned to implement in those environments had been incrementally changing for some time, even if the buildings had not. Viewed this way, it’s as if the buildings were the last component that needed to fall into place, not the start of a profound disruption to people’s ways of being.

One year, as I was working with a school who were transitioning classes into an eight-classroom equivalent ILE block, the principal and I looked for ways to help staff to take greater ownership of the process of preparing for the transition. We devised an approach that would have them work in teams then present to us on their own level of preparedness for the transition. I would ask questions and offer advice as needed. The process worked well with a number of strong recommendations being presented to the principal and me. One idea that emerged from all teams' reflections was the idea of a staged inhabitation. The teams decided to move one class into the new space, teach for a period of time then hold reflective meetings in the new space to explore what was working and what wasn't. By doing so, the school took a—potentially disruptive—term three opening of the new building and turned it into an incremental change. Step change became gradual change.

An interesting sidenote to this school's story is that the teachers were also acutely aware that classes moving into the new space initially might feel a greater sense of ownership of that space, while later arrivals might a lesser sense of belonging, or that they were arriving into another group's learning environment. To counteract this, teachers devised a set of rituals to welcome each new class when they arrived, the purpose of which was to signal the combining of two classes into one, and the guardianship of the learning environment being shared with the new arrivals.

To further align with the persistent principle of incremental change, staff sought ways to re-purpose existing systems to more closely align them to the change; for instance one team had stopped using their own individual class groupings for the school's eportfolio software and had created a larger combined class to which all teachers could post feedback. The use of the eportfolio tool pre-dated the building, but a change to a combined class occurred prior to the ILE inhabitation in order to minimise the number of things teachers were required to cope with when they eventually transitioned. This demonstrated how pre-existing elements of an environment can be adjusted ahead of a major transition to minimise the magnitude of the change when it eventually takes place. Making change as incremental as possible is important for a number of reasons:

- It ensures people stay in a "productive zone" between remaining fixed in current practice and being exhausted because everything is changing (Heifetz, Grashow, & Linsky, 2009, p. 306).
- It can be used to provide what Kotter (1996, p. 117) describes as "early wins" or

emergent evidence the change is proving beneficial from within the organisation itself.

- It acts to remove some of the “psychological uncertainty or perception of risk associated with the new alternative” (Kim & Kankanhalli, 2009, p. 569).
- It provides demonstrable evidence that the organisation has the capability to successfully implement the change, which in turn increases readiness while decreasing resistance in the minds of the uncommitted majority. As Heifetz and Linsky argued, “the people who will determine your success are often those in the middle, the uncommitted who nonetheless are wary of your plans” (Heifetz & Linsky, 2002, p. 7).

At its heart, incremental change emphasises continuity, which decreases the likelihood participants will see an innovation as an abrupt departure from previously held values and beliefs or organisational strategy. Principal Klaus always took pains to remind people that “85% of it is the same,” assuring staff that good teaching and learning practice hasn’t changed.

> You’ve got your formative assessment practices—they were happening before. We’re catering to various kids’ needs—that was happening before. Let’s remember why we went here: there was a disconnect between what we were doing (the “why”) and how we were trying to achieve it. Remember that.

What his staff heard was an important message: the baby doesn’t go out with the bathwater.

In an effort to make a potentially step change more incremental, Principal Vikram also looked for approaches staff could get used to ahead of their move into Pukeiti’s remodelled buildings. Knowing that being closely observed by colleagues in the newly opened spaces might cause feelings of insecurity or anxiety for some staff members, Vikram instituted a low-threat observation and feedback routine before work on the buildings even began. The school called these observations *peer-peeps*, and they entailed teachers on release days going into another classroom to observe and provide feedback to colleagues in the form of two positive comments and one thing the teacher could work on. Vikram reminded me one day “It wasn’t a public thing. The feedback was personal between the peers and designed to celebrate and build confidence as much as identify next steps.”

By engaging in peer peeps, staff began to feel more comfortable walking into each other's rooms, giving feedback and taking on board others' suggestions; all key behaviours for a transition into collaborative teaching. The key was that people had time to get used to this practice well in advance of the building development: incremental, rather than step change.

3.3.5 Distribute change throughout the organisation

In a 1970s television commercial for Alpo dog food, Lorne Greene announced that even he fed his own dogs the Alpo brand. This reference has gained currency across the business world to the point where the term *dogfooding* is now common parlance and refers to the act of a company using their own products, rather than simply selling them for others to use.

My own dogfooding moment came during another of those design sessions as a deputy principal for Ōkahukura College. The team was again gathered around a conference table discussing the administration area of the new school: the principal and deputy principals' offices, reception, executive office, property manager and so on. The architects brought in their initial drawings and asked us for feedback. When we saw the open-plan, activity-based work environment they had drawn up, our reaction, almost to a person, was to reject it. The conversation went like this:

Leadership team: "*Oh, no, that will never work. I need an office. If I've got a student who's in tears, or a parent and I'm having a really challenging conversation with them, I can't be doing that out in the open.*"

Architects (slightly taken aback by the response): "*Are you sure? That might be how you've been operating in the past, but this is a new building. If you're asking others to be collaborative and work in open spaces, surely you have to as well?*"

Leadership team (rationalising our position): "*We'll be very collaborative in the way we work together, but we're going to need separate offices; it's just the way schools operate.*"

Architects: "*Are you really sure?*"

Leadership team: "*Yes.*"

[Two weeks later: next design meeting]

Architects: "*So, here are our revised drawings for the admin area. Based on our last conversation, you see that we've got a series of offices down a corridor so you can—*"

Leadership team (sheepishly back-tracking): "*Yeah, so about that… We've talked a bit about how we're going to operate and we do think you maybe had a point about being collaborative. If we're asking the staff to work in collaborative work rooms and we're not doing it ourselves, it sends a bit of a mixed message.*"

Architects: "..."

Leadership team: "*We think you should probably go back to the way it was two weeks ago. We'll be open plan and use the meeting rooms whenever we need to have a difficult conversation.*"

Architects: "*We thought you might decide that.*"

In the two weeks between meetings we'd not only talked about how we were going to work together, we'd also realised that if the transition into collaborative spaces was to be successful across the school, we were going to have to eat our own dog food: we were going to have to do what we were asking others to do. If people are operating in a stressful, possibly uncomfortable place, it's not helpful if they see people around them maintaining traditional practices in relative comfort. A natural question for participants to ask is "If *they* don't have to do it, why should I?" raising legitimate questions about equity and fairness.

Distributing a change throughout an organisation is a persistent principle that also helps to develop momentum and minimise resistance because adoption of change is widespread, instead of being confined to small pockets. Principal Klaus ascribes part of the success of Ōpapa School's ILE implementation to the fact that "...it didn't become the 'Klaus, Margot and Eleanor show'. It became a really collaborative process and we were partnering our team along that journey."

If a change is distributed extensively throughout an organisation, old habits and practices are less likely to reassert themselves. A collective 'holding our feet to the fire' process occurs. Indeed one measure Ansari et al. use to determine the success of a change is the level of that change's 'extensiveness' throughout the organisation, or the degree to which it is 'comprehensively implemented' (Ansari et al., 2010, p. 72). If the change is confined to one pocket of the organisation, it's easier for people to rationalise their lack of adoption because they are in the majority: "others aren't doing it; it's only team X who are; we're okay." However, if the majority of the organisation adopt the change, individuals and teams who are not adopting it often feel conspicuous as outliers, feeling they are the last ones to come on board, bringing the power of group norms into play.

To distribute change throughout their organisations, leaders need to engage in what Senge and colleagues refer to as "systems thinking" or "seeing problems and goals—not as isolated events—but as components of larger structures" (Senge, Cambron-McCabe, Lucas, Smith, & Dutton, 2000, p. 78). Systems thinking requires leaders to focus on "the definition of desired, collective outcomes, and on the conduct of rigorous assessment to determine whether the outcomes have been achieved" (Moyle, 2010, p. 46). In other words: to ensure that *all* elements of the system are working to achieve the organisational vision, not just some of them. Ensuring change is distributed throughout the organisation is closely related to ensuring it is anchored in the culture of the organisation, and idea that is expanded upon in Chapter 6.

A common set of organisational values and beliefs is often central to distributed change efforts, which links the final persistent principle of change back to the first outlined in the conceptual framework. When viewed together, these five persistent principles demonstrate that change is often more successful when it is aligned with organisational and personal values rather than running counter to them; incremental rather than radical; participatory rather than *done to*; beneficial to all rather than a few; and distributed rather than confined to narrow areas of the organisation. Having established these atemporal principles, it's time to explore the phase-dependent—or temporal—elements of the conceptual framework.

Throughout the process of synthesising these five persistent principles, I kept returning to Choi's notion of "implementation failure" (Choi, 2011, p. 479). Even with the best learning environment design and the most capable practitioners in the world, it's still possible for the implementation to be unsuccessful without deep knowledge of change leadership principles and the skills to be able to deploy this knowledge as and when it is needed, with subtlety, in order to respond to situations as they arise.

From the principal's perspective, it's not so much *what* you do, but *how* you do it.

> Things done well and with a care, exempt themselves from fear.

—Shakespeare, *King Henry VIII*

4 Chapter 4: Findings and discussion (Preparing for Change)

Wisely and slow. They stumble that run fast.

—Shakespeare, *Romeo and Juliet*

4.1 Phase-dependent principles

The five persistent principles of change outlined in Chapter 3 are complemented by a set of temporally arranged, or *phase-dependent* principles. These are principles to which particular attention should be paid in the early, middle and late periods of a change implementation, and it's important to note that, just because a principle is listed in one particular phase, it shouldn't be assumed to be unimportant in other phases; that principle should simply be viewed as being *particularly* important in the phase within which it sits.

Figure 4.1: Simplified conceptual framework

As I began categorising these principles into a draft conceptual framework, I also began to test them against my own experience and the experience of my co-participants and key informants. The experience of testing these principles was similar to the organic, spiralling process by which the framework was initially developed. When a new phase-dependent principle emerged out of the research or interactive interviews I would firstly reflect on whether that principle was particularly appropriate for the *preparing*, *implementing* or *sustaining* phases. I would then deliberately explore that principle in my work with schools (by developing workshop activities and reflective tools to help people apply that principle to their leadership work). If the principle proved to be an important contributor to successful change outcomes, it remained in the framework; if it didn't, it was removed. As this process continued, I began to develop diagrams to help communicate to people that change often has three distinct phases, but also that it is often both linear and cyclical. One of these early diagrams is Figure 4.1.

I designed this diagram to reflect Kotter's assertion that one of the final stages of any change process should be "consolidating improvements and producing still more change" (Kotter, 1995, p. 61). The end of one change process often marks the start of the next.

In my work with schools I have certainly seen this: schools are complex organisations comprising multiple, interdependent units, so the completion of one change effort (innovative learning environments for instance) often requires the implementation of subsequent changes (developing collaborative teams) which, in turn, necessitates further change (adjustments to the pastoral care system) and so on. While each individual change phase might seem linear when outlined on an action plan or Gantt chart, these methods for representing change often falsely disconnect the change from its context and interdependencies, falsely suggesting it exists in a disconnected, linear reality.

It's also important to note that, while organisations may feel they have successfully 'completed' any given phase of a change process, subsequent work may reveal that key understandings haven't been cemented sufficiently to proceed further, in which case leadership would be prudent to fall back to the earlier phase in order to address these shortcomings. I have experienced this in schools where leaders have not spent enough time developing a deep understanding of *why* the change is needed which results in employees having a brittle commitment to the change. When the going gets tough, people don't have the deep commitment of a values-based commitment to change and often draw back from implementing the initiative. In these situations, principals often have little choice but to re-visit 'the why' to renew the momentum and develop a more resilient commitment to the change.

As I continued to analyse the principles in the three temporal phases, clusters began to emerge. For example, in the preparing phase, two distinct categories of action became evident: those related to the *climate* of the organisation; and those related to *capability* of individuals and teams in those organisations. Both elements appeared to be important: people *and* place, and my research became increasingly focused on exploring the relationships between them. The culture and climate of an organisation needs to be conducive to change, but individuals also need to possess capabilities that are conducive to implementation, because, as Vakola found:

> Organizational change cannot be effectively implemented without change recipients' willingness to change themselves and support the suggested organizational change programme/initiative. (Vakola, 2013, p. 98)

To add further complexity to the interaction between organisations and individuals, one way of viewing organisational culture is that it is an aggregation of the actions undertaken by individuals, while group norms and culture in turn act to shape individual behaviour. The two are symbiotically linked and are also discrete unto themselves.

4.2 Create a favourable climate

> **Workshop transcript**: When you're asking people to engage in change, you're asking them to do something that involves risk, and risk contains the possibility of failure. If people are concerned about the impact of potential failure on their standing in the community, their workload or their effectiveness, they may choose not to engage in change because it's simply safer to do nothing.

4.2.1 Build trust

No individual exists in a vacuum, and as Vakola observes, the norms of the groups to which people belong can have "a powerful effect on members' behaviour, beliefs and values" (Vakola, 2013, p. 97). People are shaped by those around them and with whom they spend their time, most powerfully by those whom they *trust*. Psychological safety (or at least an absence of psychological danger) is an antecedent most people require before changing behaviour. As Chawla and Kelloway note, "trust is particularly critical for large-scale change because such a change effort is relatively high in risk" (2004, p. 486). In order to minimise barriers to the adoption of new behaviours, leaders should develop trust at multiple levels throughout their organisations.

4.2.1.1 Build trust in the governance and senior leadership teams

Trust in senior leadership is defined by Devos et al. as being:

> The degree of confidence the members of a team have in the goodwill of its leader, specifically the extent to which they believe that the leader is honest, sincere, and unbiased in taking their positions into account. (Devos, Buelens, & Bouckenooghe, 2007, p. 611)

Schneider et al. note that, when (in addition to participating in decision-making) employees feel “their interpersonal relationships are characterized by mutual trust,” change is more likely to gather momentum (Schneider, Brief, & Guzzo, 1996, p. 11). High levels of trust also lead to employees viewing changes proposed by senior leadership as being more legitimate (needed) and credible (worth implementing) (Rousseau & Tijoriwala, 1999, p. 515).

Devos et al. also found that when employees feel high levels of trust in senior leadership (particularly when that leadership acts with “consideration and fairness”) those employees are more likely to be supportive of change [but] “if they have less trust in management, they will demonstrate decreased levels of readiness for change” (Devos et al., 2007, p. 611). Oreg demonstrated that an absence of trust decreased employee readiness and resistance, noting that it also led to:

> Increased reports of anger, frustration, and anxiety with respect to the change, to increased actions against it, and in particular to negative evaluations of the need for, and value of, the organizational change. (Oreg, 2006, p. 93)

I witnessed the impact a lack of trust can have on a change project first-hand with one of my clients. I was working with a school to try to gain some momentum with their move to innovative learning environments, and I was following a process I found had worked well in many other schools: establish a sense of urgency to generate momentum, then establish a set of publicly agreed upon goals for the project and work towards those goals. One of the team leaders was very good at taking ownership of this process: diligently noting each action point that came out of our planning meetings; recapping what was agreed to at the end of the session and ensuring everyone knew what their particular actions were over the coming weeks. Without fail, when I returned for the next session, people hadn’t completed their follow-up activities. Other—apparently more pressing—work always got in the way.

It wasn’t until I was talking to one of the teachers at morning tea one day that the penny dropped for me: it wasn’t that the teachers *distrusted* senior leadership; it was that a crucial member of the senior team was missing. Shortly after engaging me, the principal who initially invited me to work with the school took up an appointment at another school. While the school went through the process of appointing a replacement, one of the deputy principals took on the role in an acting capacity. In conversation with this staff member I realised she was anxious and hesitant about the appointment of a new principal because it was possible that the current strategic direction toward innovative learning environments might not be continued. The uncertainty had led to a *no-mans-land* where staff were uncertain about committing to change, preferring to continue with business-as-usual.

Conversely, Principal Dmitri was adamant the fact that his community embraced change was (in part) due to him having been principal of the school for a number of years ("probably too many" he said self-deprecatingly). Dmitri believed this continuity and stability created a platform of trust and confidence between leadership and the community: "Had I been in my second or third year it'd be far different. And I think that probably plays a big role." He is also aware of how important it is to keep renewing that trust constantly: "I'm here every Saturday—watching sport and things. People see me in the community a lot."

Principal Klaus found himself in exactly the opposite situation as he began his ILE implementation: he was new to the school; new to the role (as a first time principal) and relatively young: "I was a 32 year old male who...they felt was just challenging them all the time."

Klaus realised he needed to develop trust with his community and made the bold decision to put Ōpapa School's ILE development on hold for six months in order to do so. This decision was a considerable gamble because members of the community might have interpreted this delay as being evidence that Klaus wasn't fully behind the development, but he knew he would not make progress without the community fully trusting him. During this period Klaus defined the vision and values that were going to drive the project, worked to build his credibility in the community by "getting key people around [him]"; while taking pains to be honest and transparent about what was happening and why it was occurring. This openness was important; Klaus believes his transparency was one of his most significant trust building actions:

> Being transparent was enormously important: "This is the shift we're thinking of. This is why we're doing it. And here's how we are going about it."

Principal Vikram also knew the trust staff and community had in his senior leadership team would carry significant weight. As he says "Our leaders are our best." It was essential for Dmitri to have these leaders involved from the outset because they had mana[5] on staff, and people looked to them as leaders because of this level of trust. Klaus

5 Respect, credibility, standing (Māori).

also imagined other staff members thinking: “If these leaders with mana are willing to have a look at something new, there might be something in it.” For him, his leaders’ *pedagogical* competence (rather than their administrative ability) was central to their trusted position in the school:

> If you’re in a school where people have become administrators as APs and DPs or syndicate leaders because they have the minutes lined up correctly and every note gets home on time. Those people may not have been able to pull it off. And people know that.

4.2.1.2 Build trust in middle leaders

As well as trust in senior leadership, trust in middle leaders (sometimes referred to as ‘supervisors’ in research literature) is important: “trust in the supervisor during organizational changes has been recognized” (Neves, 2009, p. 625), with high levels of trust leading to increased levels of affective commitment to the organisation; ‘citizenship’ behaviours; and increased staff retention, even through change (Neves & Caetano, 2009, pp. 636–637).

Conversely, a lack of trust impacts negatively on organisational effectiveness, leads to decreased cooperation between team members (Ferrin, Bligh, & Kohles, 2007, p. 474), a decreased sense of cohesion in teams (Vlaar, Van Den Bosch, & Volberda, 2007, p. 414) and ultimately, less effective teams (Peters & Karren, 2009, p. 494).

Affirming the findings of this research, Principal Klaus experienced a pivotal moment in Ōpapa School’s ILE implementation when trusted team leader Jopling returned from maternity leave. Alongside what the principal described as her “huge credibility in programme design” she brought a fresh set of eyes and an ability to use them as a *credible* critical friend to explore what was happening in the collaborative spaces. Despite being a busy young mum, Jopling made a strong commitment to the new approach, and to leading her team. Klaus noted that, even though she had a young family and other commitments, “she was able to drive it” and this gave the rest of the team confidence and a renewed commitment to the change. As well as being highly skilled, the level of trust in which Jopling was held by team members served to be a crucial turning point in the change process. I’ve also seen other middle leaders—those who don’t enjoy the same levels of trust from team members—struggle when trying to implement change. ‘The broomstick brigade’ was a case in point.

The broomstick brigade

In a different school, I was working with a group of middle leaders who were taking their relatively traditional organisation through some significant changes in pedagogy. On this particular day we opened our regular mentoring session with the usual round of 'one up; one down' (one success and one frustration the leaders had experienced since our previous meeting). We moved round the group with each person sharing small victories and annoyances until we got to Sam, probably the least experienced leader in the team, and the one who had to lead a well-known group of curmudgeons. Sam's team were all late in their careers; very experienced; and had held various leadership positions in the past. Despite the fact the initiative the group was implementing was well-researched and had shown promising initial results within the school, Sam's teachers (collectively known as 'the broomstick brigade') had refused to implement the change; going as far as undermining Sam (as a relatively inexperienced leader) as a means of avoiding having to engage with the initiative.

As Sam described some of the team's behaviour—from making a pact with each other to not say anything in team meetings, through to holding covert planning meetings without inviting Sam—the rest of us listened in disbelief. She eventually crumpled into tears, saying she was trying her best to implement the change, but didn't know what to do next. Compounding matters was the fact Sam had taught alongside these teachers as 'one of the team' before taking up her leadership role: the move from 'bud to boss' requiring renegotiation of relationships and responsibilities. As we all worked to reassure Sam, explore the challenge and suggest potential solutions, I kept coming back to the hunch that the team's behaviour was motivated in part by the fact they didn't trust her (as someone with considerably less teaching and leadership experience) to implement the new approach.

If the team had had more trust in their leader's ability to implement the initiative, I'm sure they would have been more open to change, but this wasn't the case. What had happened was that when the team felt threatened—by a potentially unsuccessful change implementation, or by a young leader being more capable than their more experienced selves—they banded together to protect themselves: team against leader. In doing so they demonstrated a form of resistance to change observed by Inandi, whereby team members, seeking strength in numbers, "adopt group norms in order not to be excluded by the group" (Inandi, Tunc, & Gilic, 2013, p. 197). In these situations, poor behaviour by one team member (such as being uncooperative in meetings) is adopted by others as a means of showing solidarity and self-preservation.

4.2.1.3 Build trust in team members

When working with newly formed collaborative teams I often begin by asking them to brainstorm the features of an effective co-teaching team as a means of gauging their definitions of success. One of the ideas that routinely emerges early in discussion is the idea of trust. My follow-up question to this observation is often “If relational trust is important, what deliberate acts build it?” People often struggle to put specifics around deliberate acts of relational trust-building other than to talk generally about honesty and integrity. There’s often a vague sense that team-building activities can develop mutual trust, but in every audience there is invariably someone who can’t abide the idea of ‘organised fun’ with workmates, and if anything ‘trust falls’ and ‘name games’ would erode their sense of workplace satisfaction.

When I asked Principal Klaus if he would do anything differently in his innovative learning environment implementation, he paused, thought for a moment and said:

> I guess if I did things differently I would engage in more professional learning around the culture of teams. You know, in life everything’s about team.

I think Klaus was right to place such an emphasis on the way teams work together, particularly in innovative learning environments. Trust in teams is essential to an effective change implementation: teams that don’t trust each other don’t take risks.

Not only does a lack of trust within a co-teaching team lead to stalled progress on ILE implementations, it can also lead to a breakdown of relationships to the point where the team becomes dysfunctional (“We’ve reached the point of no return and it’s just easier to get on and do your own thing”). Sometimes it’s a single event, such as one team member going behind another’s back but, more often, this kind of dysfunction is the result of a gradual decline in the relationship due to trust decreasing as a result of multiple minor perceived betrayals. It’s a ‘death of a thousand cuts’, and explains why most of the meeting rooms and principal’s offices I’m familiar with have a box of tissues on the table. Working on trust and team dynamics is often emotional, personal work.

Occasionally when I begin working on effective team function with leaders, someone will get to the verge of tears recounting what has gone wrong with his or her co-teaching team members. These conversations often centre on an “elephant in the room” (Heifetz, Grashow, & Linsky, 2009, p. 165). The small perceived betrayals (one teacher’s failure to complete their planning on time, a leader’s unilateral decision-making, failure to consult, one co-teaching partner disregarding another’s wishes) seem petty when considered on their own, but cumulatively these slights can create a negative spiral of perception and reality whereby even innocuous actions can be misread by the other party as a further slight against them.

> **Workshop transcript**: The vicious circle works a bit like this [I point to the bowl of mints in the centre of the meeting room table]. Notice that Jack hasn’t offered me any mints yet. I came in, sat down and we’ve been here for what, twenty minutes? Those mints have been sitting next to Jack the whole time and *not once* has he offered me any. I bet that’s because he still hasn’t forgiven me for that conversation we had last week about him when he didn’t get his planning done on time. I can’t believe he hasn’t gotten over it! Look at him there pretending to take notes on the meeting. I bet he’s laughing on the inside. That’s so petty! Well two can play at that game. I’m going to make sure I put his name against these two tedious jobs on the agenda. That’ll show him.

Most teams chuckle at the realisation that this over-acted interior monologue is not only petty but also entirely plausible, and possibly something they can conceive of taking place in their own (or their team members’) heads. On the importance of trust, Patrick Lencioni observes: “Teams that lack trust waste inordinate amounts of time and energy managing their behaviours and interactions within the group” (Lencioni, 2006, p. 196).

Acts that erode trust might be overt (deliberate snubs or ad hominem criticism) or covert (failure to offer support when needed, ignoring suggestions or responding to them with silence) but obvious or not, they all run counter to what leads to deep feelings of trust between team members. Because a trusting environment is necessary for successful organisations, all employees bear some responsibility for engaging in trust-building activities, but school leaders bear a particular responsibility for ensuring the conditions are right for trust to develop. Principals in particular must ensure all parties not only know how to build trust but also have the capability to successfully undertake these actions.

> Principals’ actions play a key role in developing and sustaining relational trust. Principals establish both respect and personal regard when they acknowledge the vulnerabilities of others, actively listen to their concerns,

> and eschew arbitrary actions. Effective principals couple these behaviors with a compelling school vision and behavior that clearly seeks to advance the vision. This consistency between words and actions affirms their personal integrity. Then, if the principal competently manages basic day-to-day school affairs, an overall ethos conducive to the formation of trust will emerge. (Bryk & Schneider, 2002, p. 43)

Bryk and Schneider's identification of the importance of both institutional trust (which is about "employees feeling safe within the organization and being supported by the employer" (Erdem & Aytaç, 2019, p. 77)) and relational trust is important because the two principles are interdependent: those who feel they have trusting relationships with other members of their organisation are more likely to feel higher levels of *institutional* trust. A culture of trust at school "improves collaboration among administrators, teachers, students" and promotes more socially responsible behaviour, which in turn engenders further trust (Erdem & Aytaç, 2019, p. 77).

Having high levels of relational trust between team members is particularly important in innovative learning environments, because, as Principal Vikram says:

> Some of my best teachers [felt they lost] their ability to be able to have that one kid that they want close to them all day, close to them all day. They had to trust that others may be able to deliver to their child across their hub.

In co-teaching environments, because an individual teacher is not in control of the whole environment, they have to trust that the team's standards and approaches to learning are being upheld consistently by other team members.

To avoid a team environment where trust is lacking (which might potentially lead to dysfunction), Bryk and Schneider offer a specific framework for building relational trust that centres on four key categories of actions.

- Respect, or valuing the ideas of others: taking the blame; sharing the praise. I often see this in teams who seek to include the contributions of all team members in the development of an approach or solution. One school I know of refers to this as 'plus one-ing' or adding value to everyone's ideas.
- Personal regard for others: caring about the personal and professional lives of people; seeing them as being more than a role description or job title.
- Competence in role: performing the duties associated with your job as well as you can. Not necessarily being perfect, but working to be the best you can be.
- Integrity: walking the talk, keeping your word, resolving conflicts in a principled

and even-handed manner. Acting in line with the principles of the organisation, and dealing directly with people without going behind their backs or 'up the chain' of leadership (Bryk & Schneider, 2002, pp. 41–42).

It's this final category of action that I see most often in teams that have lost trust in each other: people feel that the other has gone behind their backs or has consistently failed to do what they said they would do.

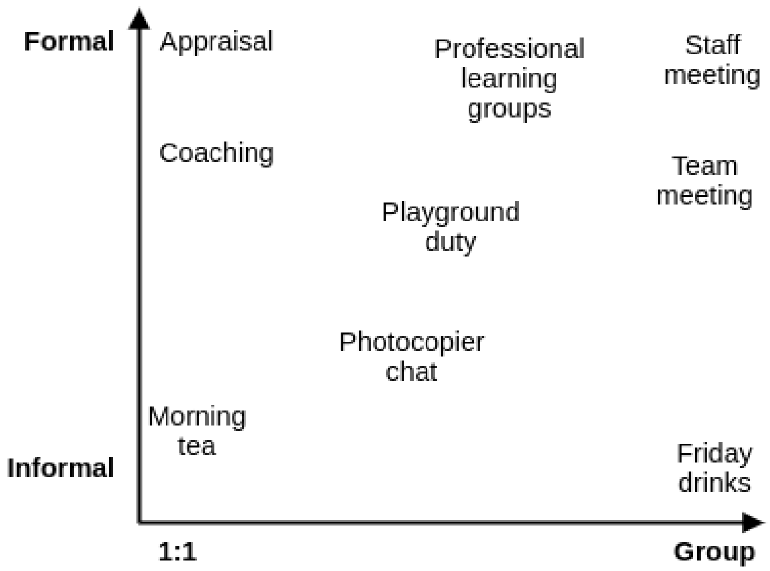

Figure 4.2. Possible contexts within which team members can develop relational trust.

To help teams reflect on the individual and collective acts that build trust I often have them explore 'The Trust Matrix'. This device acknowledges that trust-building opportunities can be organised using two axes: from one-on-one to large groups, and from informal through to formal, as illustrated in Figure 4.2. When working with teams on this activity I ask people firstly to place in the appropriate quadrant all of the trust-building acts they undertake with colleagues, and secondly to reflect on which trust-building opportunities they employ most often and least often. Quadrants with more or fewer examples listed inside them are worth further reflection: Why do people find themselves in those quadrants? Is there anything wrong with that? Are they missing any opportunities that might exist in other quadrants?

A conversation with someone over the photocopier might not be the first thing that springs to mind when considering relational trust, but even in that context, opportunities exist to admire what a colleague has planned for their class (interpersonal respect), or if their colleague is speaking disparagingly about another staff member, to quietly suggest they might consider raising the matter directly with the person concerned (integrity). While undertaking playground duty, a team member can learn more about a colleague's family, weekends or interests. The relational trust built when this take place initially can be compounded if the team member not only remembers the conversation, but also builds on it the next time they see that colleague.

I have found Tuckman's developmental model of the stages of small group performance useful here as well. Tuckman is referenced widely in schools and he holds that groups evolve through the following stages of maturity:

- Forming, which is often concerned with orientation with tasks and standards; testing task and interpersonal boundaries; and the establishment of dependency relationships with leaders, other group members.
- Storming, which is often characterised by conflict around either interpersonal issues, issues related to the task or resistance to group influence.
- Norming, in which in-group feeling and cohesiveness develop, new standards evolve and are agreed to, new roles are adopted, and intimate, personal opinions are expressed.
- Performing, in which roles become flexible and functional; group energy is channelled into the task; structural issues have been resolved, and structure can now become supportive of task performance (Tuckman, 1965, p.396).

For newly formed teams, the storming phase can be productive when it results in team-mates finding common ground and agreement on purpose or work standards, but the robust argument that often takes place during storming can also be destructive. If relationship-based conflict occurs (as opposed to task-based or process-based conflict) this may strain relationships between team members to the point where rational, unfiltered discussion about important issues is not possible (Simons & Peterson, 2000). If team members feel personally threatened because discussions have become ad hominen, they may not be able to engage in rational, logical, dispassionate exploration of ideas, descending instead into defensive mode: fight, flight or freeze. For people experiencing this kind of challenge, arriving at the best solution is a secondary priority to saving face or the act of protecting oneself from emotional damage, as Ford et al. note, relationship conflict tends to "overshadow or dominate task conflict" (Ford, Ford, & D'Amelio, 2008, p. 369).

How dysfunctional a team can become when relationship conflict supersedes task-based conflict was illustrated by one team with whom I worked. Due to personality clashes and the inevitable change that often takes place in schools, one team leader had experienced considerable turnover in her team to the point where she hadn't remained with a single team member for more than one year.

When I arrived to work with the team, the challenge on the surface was the team leader not taking on board the suggestions of the other two team members. The team had followed what I thought was a good process at the beginning of the year: establishing a team agreement that specified they would seek and use all team members' contributions in decision-making; something that was not happening. In conversation, the team leader admitted she felt (because she had more experience than the team members) that her approaches were often 'right' and should therefore be tried first. As we got deeper into the conversation, the team leader confessed that she also couldn't see the point of acting on the team members' suggestions "because it'll probably change again next year." With this frame of mind, the failure of the team was self-fulfilling: if it was not an effective team it would likely be disbanded the following year; and if it were to be disbanded next year, there was no point in building team effectiveness *this* year. It had become a vicious circle because of the relationship conflict the team leader was feeling: a circuit breaker was necessary. The team decided to go back to the original agreement and put it into practice; to take control of their future.

I have observed that an activity that is essential to undertake early in the lifespan of a team is to explore and find common agreement on all of the team members' respective expectations of each other. This process is essential for establishing a set of group norms to guide the behaviour of team members. An approach I use to facilitate the establishment of these norms is a structured conversation using a set of prompt cards. The process includes discussion of elements such as what people's expectations are of each other related to levels of communication, quality of work completion, note-taking and agreement in meetings and dispute resolution. I even ask people to talk about their top two 'pet peeves' as a way of helping to normalise the team talking about potentially emotionally charged 'hot button' topics.

These conversations are all designed to avoid one of the key sources of disagreement in collaborative teams: mismatched expectations. These kinds of agreements are most useful when they have two key features:

- They are detailed enough to move beyond general principles into challenges of practice: if one group of students is so noisy that they are interrupting the learning of another, who intervenes and how?

- They are not so detailed that they turn into a laundry list of every conceivable eventuality. If you are trying to life by a thousand rules; you'll end up living by none of them.

What teams often find most challenging about this process is that it asks them to move straight into the 'norming' stage of Tuckman's (1965) model without necessarily having the high levels of trust in place required for the storming (or disagreement) phase.

Workshop transcript: It's the beginning of the year and we're a new team coming together. It's the teacher-only day in January and we've all got lovely suntans from our summer—nice and relaxed and ready to do our best for the year. You may not know me very well—perhaps you or I are new to this school, or perhaps we've worked together but not in the same team. As we're working through the process of developing our team agreement, I throw out a few crackpot suggestions about learning that you don't feel entirely comfortable with—perhaps I talk about how I think kids learn best when they're all facing the front listening, or that I don't think there's anything wrong with a bit of good-old-fashioned worksheet learning. Because we're only just getting to know each other, you might not feel confident to challenge me on my beliefs, or you might be reluctant to potentially strain our growing relationship. What's important in this process is that we're aware of the process of effective team formation and we agree on a time to revisit these norms we have established. I advise people to go back to them before the end of term one and review what they have agreed upon, in the interim engaging in the categories of actions that build relational trust. The review checkpoint asks people to do one of two things: either affirm and recommit to the group norms agreed to on initial group formation, or to (by common agreement) adjust those norms in the knowledge that less confident team members should feel more confident challenging some of the things agreed to in the earlier conversation.

Working with a team who were experiencing significant friction, I asked them what they had done to set themselves up for collaborative success, including the development of group norms around their expectations of—and obligations to—each other. They spoke vaguely about communication and trust but agreed that they hadn't developed a set of guidelines to which they had committed to hold each other. The team leader eventually asked me: "What would some of those collaborative norms be?" I realised the team leader themselves didn't have sufficient knowledge to develop a set of norms with their team.

I took this as a clearly identified need and developed a set of playing cards for use in workshops with people. Half of the cards are provocative scenarios that often occur in teams and lead to interpersonal damage, and half were examples of team norms that might prove useful to avoid these damaging scenarios, or at least minimise the damage caused. Examples of these cards are outlined below.

- [Team member] always checks the time on their phone throughout the meeting.
- A team member contributes very little during meetings, but is clearly listening
- The meeting often goes off agenda with random things being explored.

- I say I'm going to do it but things always get in the way.
- There's clearly a personal issue going on between two of the team and things are frosty.
- Given any opportunity [insert name] always brings the conversation back to their pet peeve.
- We walk on eggshells because we're waiting for [insert name] to snap at something we've said.

Team members take turns to share scenarios they think are particularly important, then work to agree on a set of norms that might prevent those scenarios from occurring or from causing damage to the team if they did occur. Typically teams land on examples such as:

- We bring data; we use data
- We pause before responding
- Ask questions before making statements
- We are self-aware; we know how others prefer to operate
- We encourage others' participation
- We find and celebrate others' strengths

An illustration of how important it is for people to feel their ideas are valued and welcomed by others occurred when two members of a team had (independently of each other) met with a principal to share their frustration at the fact that their suggestions and ideas around teaching and learning were not being picked up and used by their team leader. The team leader in question (who was still a relatively inexperienced teacher) had slightly more years of experience in innovative learning environments than the team members, and thus felt she was better qualified to make decisions about what should happen in the space, often saying, "I've done it this way for the last couple of years and it works well." While these responses might have been intended to generate confidence in her decision-making, what the team leader failed to see was that her preference for approaches that had been used in the past was eroding the team members' trust in her because they felt their ideas weren't being appreciated.

As I was exploring some of the issues with the team, one junior team member confessed that she was bored teaching things in the way the team leader had chosen for them, and if she was bored, the students certainly would be too. The team leader confessed that at times she felt she wanted to "take [her] leadership hat off" because she felt caught between the school-wide expectations and the desire to create engaging learning experiences for students. We talked about seeking a mandate from senior leadership to experiment with new ways of doing things.

At the heart of these mismatched feelings was a lack of clarity over what constituted success for the team: the team leader held a belief that the goal was to align with school-wide expectations while the junior team member felt that developing fun, engaging teaching and learning activities was the best way to achieve the outcomes desired by the school. We identified that the team had a shared belief of what the purpose of their work was ("It's always about the learners") but they hadn't agreed on a set of concrete approaches they believed would best achieve the outcome. They hadn't agreed whether teaching rigid reading, writing and maths groups was the best way to proceed or whether they should be going outside with their classes, collecting leaves, making mud pies or putting their hands in jelly as a way of generating rich literacy experiences.

My reflection on this is that high level principles are important but often too vague to be useful. Conversely, "should we put our cellphones in a basket, place them face down on the table, in our pockets or turn them off during meetings?" leads teams into a mire of endless detail that frustrates and encourages mindless compliance: the letter of the law rather than the spirit of it.

Another workshop activity that helps people to reflect on how to build a successful team is centred around Patrick Lencioni's (2006) "Five Dysfunctions of a Team." I ask people to assemble the dysfunctions into the sequential order that Lencioni proposes, discussing with team mates what goes where and why. Lencioni's argument is that the most common dysfunctions emerge out of a lack of trust. When people can't make themselves vulnerable with each other, they can't confront issues that need addressing. Without that, poor quality decisions are made which the team only pays lips service to which, in turn, leads to an absence of holding each other accountable, an inattention to results and the inevitable focus on individuals defending and protecting themselves because they know team goals are not going to be met.

This trust-building is essential because team members have to rely on others performing their part in a complicated, interdependent dance. As Bryk and Schneider note: "all participants remain dependent on others to achieve desired outcomes" (Bryk & Schneider, 2002, p. 41)

Choi’s meta-analysis on readiness for change supports this very personal and relational view of trust and openness to change. She cites several studies that suggest one of the causes of organisational inability to achieve the intended aims of a change is an over-reliance on macro-level factors (institution, implementation, or systems elements) instead of micro-level (individual or employee-level) elements:

> These researchers claim that organizations only change and act through their members, and successful change will persist over the long term only when *individuals* alter their on-the-job behaviors in appropriate ways [emphasis added]. (Choi, 2011, p. 480)

Without trust in team mates, and a climate that is conducive to risk-taking, individuals won’t feel safe enough to take the kinds of risks often associated with change.

In a climate where trust is high, people also feel safe to bring themselves fully to their work, rather than leaving their true selves at home (Kahn, 1990, p. 708). Kahn refers to these two opposing positions as *personal engagement* and *personal disengagement* (Kahn, 1990, p. 694), describing engagement as “the harnessing of organization members’ selves to their work roles; [when] people employ and express themselves physically, cognitively, and emotionally during role performances.” Personal disengagement, by contrast, is “the uncoupling of selves from work roles; [when] people withdraw and defend themselves physically, cognitively, or emotionally during role performances” (Kahn, 1990, p. 694). In an unsafe environment, people choose disengagement over engagement, and the contribution of the kind of discretionary effort that comes with moving away from the status quo is unlikely.

4.2.2 Demonstrate senior leadership’s commitment to the change

Closely linked to the notion of trust in leadership is the degree to which people believe senior leadership is committed to a change. Senior leaders often give indications about the approaches they believe are worth pursuing and those they believe are not. These clues can be overt (such as openly funding trials and prototypes) or covert (such as ‘letting their silence speak’ by not publicly endorsing an idea). When employees engage in change they take on a level of risk because, although they *hope* the change will lead to improved outcomes, the possibility exists that outcomes may in fact be less satisfactory. This inherent risk is compounded if the new approach is not overtly supported by senior leaders, as teachers are essentially putting themselves out of step with those who hold significant power in their organisation.

Bryk and Schneider found that trust in senior leadership "reduces the sense of risk associated with change" (Bryk & Schneider, 2002, p. 43), while Holt et al. found that managerial support was a significant factor influencing an employee's level of change readiness (Holt, Armenakis, Feild, & Harris, 2007, p. 251).

Mangahuia School saw the importance of overt managerial support for change when the Chair of their Board of Trustees made some courageous decisions to progress their building project, sometimes against Ministry of Education advice. Principal Dmitri found this public support for the project invaluable for gaining momentum, describing it as being 'key' for their change. The board chair's support was so important for community and staff support for the project that Dmitri believes it wouldn't have happened with someone less committed in the role: "I couldn't have done it with my current board chair."

In contrast, Principal Klaus—as a novice principal—found himself facing one of the most significant challenges of his career to date when he realised he had, "a board chair, who at board meetings was supportive of [the change], but behind the scenes was not." The threat was two-fold: an equivocating board chair not only undermined the success of the project, they also undermined Klaus as a principal who had publicly supported the project. The situation was resolved after about 18 months when principal and board chair agreed "This isn't going to work." When the board chair moved sideways and a more supportive person took over the role, Klaus noticed a significant change: "Since then we've been able to fly."

In addition to the new chair's 'huge' credibility in the community, their support of the project has ensured the community saw the senior leadership team as being united:

> It didn't become the Klaus, Margot and Eleanor [senior leadership team] show. It became a really collaborative process and we were partners along that journey.

This sense of having a 'united front' is important if staff are to feel that the change is not a passing fad or a single person's hobbyhorse. Collective commitment suggests that the change project is part of a longer-term vision; that it will remain even if a key sponsor leaves the organisation; or a crucial annual plan is completed. This collective commitment is such an important condition for success that Principal Vikram is now highly attuned to it and notices when schools visit Pukeiti without all of their senior leadership team. When that occurs, he says, "They're rarely successful."

4.2.3 Foster affective commitment to the organisation

Affective commitment to an organisation has been found to be important to their effective functioning regardless of whether those organisations are going through change or not. Defined as "the loyalty an individual has for an organization" (Porter, Steers, Mowday, & Boulian, 1974, p. 6), affective commitment has been found to be an antecedent of positive organisational outcomes including decreased staff turnover and increased attendance at work; positive organisational citizenship behaviour, job performance; and employee health and well-being (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002, p. 39). Blau and Boal also found:

> Employees with a high level of organizational commitment feel positively about the organizations they work for: They identify with a particular organization and wish to maintain membership in it. (Blau & Boal, 1987, p. 289)

McKay et al. have demonstrated that when people feel high levels of affective commitment to an organisation—a connection to, and ownership of that organisation's vision, values and beliefs—they are more likely to commit to change, and therefore less likely to resist it, even when that change involves "transformation or removal of valued organisational features" (McKay et al., 2013, p. 31). Greater affective commitment also leads to increased trust that the transformations endorsed by the organisation will entail benefits to all stakeholders (McKay et al., 2013). Furthermore, Chawla and Kelloway found a mutually beneficial relationship between *participation* during a large-scale change intervention—which resulted in higher levels of employee affective commitment to the change—and increased trust in management (Chawla & Kelloway, 2004, p. 488). It's worth noting the 'virtuous circle' this research reveals: high affective commitment leads to support for change; participation in change leads to increased affective commitment and trust in management.

The virtuous circle

I saw the affective commitment virtuous circle first hand at Pararahi School. Their innovative learning environment implementation could easily have stalled and lost momentum for a range of reasons: their long-standing principal left halfway through the implementation; the school was in a relatively isolated part of the country with a conservative community; there were no other supportive ILE schools around them. Yet the school implemented their ILEs with a high degree of success. What made the difference? What shifted the scales in favour of success?

They undertook the building work in conjunction with the development and embedding of a set of 'essential beliefs' for learning over which teachers, students and community were widely consulted. The process took around 18 months and staff in particular worked hard to draft sets of indicators for each belief. The development of the learning environments took place in parallel with this conversation about learning and provided the school with an opportunity to create physical spaces that would support the development of the essential beliefs. Watching and supporting the process, I could see how genuine, meaningful engagement with staff and community led to increased affective commitment, which in turn generated increased commitment to the implementation of innovative learning environments as a means of bringing to life the aspirations the community had collectively developed.

In situations like this where affective commitment to an *organisation* transfers to affective commitment *to the change process*, participants demonstrate "a desire to provide support for a change initiative based on the belief in its inherent benefits" (Herscovitch & Meyer, 2002, p. 475). Of the three main forces that encourage people to engage with change, affective commitment has been demonstrated to be the most potent. Less powerful are "normative commitment to change" (a sense of obligation to provide support for the change) and "continuance commitment to change" which involves supporting the change because the employee fears the cost of leaving the organisation (Meyer et al., 2002, p. 38).

4.2.4 Build adaptive capacity

The practice of "adaptive leadership" was first proposed by Heifetz in 1994 who noted that, in challenging times leaders must go beyond simple 'transactional leadership' where *transactions* are defined as "specific interactions between leaders and followers" (Heifetz, 1994, p. 17). Heifetz argued that transactional leadership is based on reciprocity whereby "the leader reaps the benefits of status and influence in exchange for reducing uncertainty and providing followers with a basis for action," (Heifetz, 1994, p. 17). Heifetz argued that, as most organisations now operate in complex, dynamic contexts, the removal of uncertainty is impossible. The reference to Darwinian evolution in 'Adaptive Leadership' is deliberate: Heifetz saw a parallel between the way species evolve and adapt to make better use of their surroundings (or to respond to changes in their environment), and the way organisations must adapt if they are to avoid extinction.

To underline the importance of adaptive leadership, Heifetz et al. argued that there are two broad categories of challenge faced by organisations today, each of which require a specialised approach.

- Technical problems—problems that can be diagnosed and solved, generally within a short time frame, by applying established know-how and procedures (Heifetz et al., 2009, p. 307).
- Adaptive challenges—murky, systemic problems with no easy answers, [often] requiring unfamiliar roles, responsibilities, values, and ways of working (Heifetz & Laurie, 1997).

Waters et al. argued that in addition to being different in nature, these two categories of change also have levels of impact for those who are experiencing them. They argued that technical change (which they also refer to as ‘incremental’, ‘continuous’, ‘alpha’ or ‘first-order’) has a lesser degree of impact on participants, while adaptive change (‘fundamental’, ‘discontinuous’, ‘gamma’ or ‘second-order’) has a greater impact on people (Waters, Marzano, & McNulty, 2003, p. 6). To further differentiate between the two categories, Waters et al. offered the following list of features (Table 4.1).

Table 4.1.

Features of First- and Second-order Change

First-order change	**Second-order change**
• An extension of the past • Within existing paradigms • Consistent with prevailing values and norms • Focused • Bounded • Incremental • Linear • Marginal • Implemented with existing knowledge and skills • Problem- and solution-oriented • Implemented by experts	• A break with the past • Outside of existing paradigms • Conflicted with prevailing values and norms • Emergent • Unbounded • Complex • Nonlinear • A disturbance to every element of a system • Requires new knowledge and skills to implement • Neither problem- nor solution-oriented • Implemented by stakeholders

When considering how leaders might support team members experiencing the impact of first- and second-order change I remind people that no two people experience (or respond to) change in the same way. A story I often tell is of being in a conference masterclass with Tim Waters himself where he explained how to tell the difference between a person who is experiencing change as first-order and one who is experiencing it as second-order: “First of all,” he said wryly from the podium, “People’s talk sounds like complaining. Second: they’re crying.”

Laughter rippled across the room at the time, but behind this observation is a level of truth. It’s the emotional side of change I hadn’t fully considered before this masterclass: my unconscious framework was that the workplace requires logic and rationality; emotion should really only occur in one’s personal life. What Waters went on to explain (and what I share with workshop participants of my own) is that being overwhelmed by emotion when in the middle of a transformational change is a perfectly reasonable reaction when that change contains those features outlined on the right-hand column of Table 4.1. When I explain this to audiences, there’s often a palpable sense of relief as people feel validated for having an emotional reaction to challenging situations.

“So there’s nothing wrong with me if I get so stressed I can’t think straight?” people seem to say. “Nothing wrong with me if I wake up at 3 in the morning with my head spinning, or burst into tears when talking to the Principal about what’s happening?” No, I answer. In fact, if people *didn’t* feel some kind of emotional stress while going through disruptive change, there’s probably something wrong with them. When people are in this kind of second-order change, leaders need to ensure they are getting the support they need, because, as Heifetz et al. note: “The most common cause of failure in leadership is produced by treating adaptive challenges as if they were technical problems” (Heifetz et al., 2009, p. 19).

Workshop transcript: [Image on screen: Pony Express rider]

So imagine that we’re all riders for The Pony Express. We love horses, are skilful riders and appreciate that fact that our job is also our passion. Now imagine that The Pony Express made a few changes to the way we did things (which they historically did). They changed the way we fed our horses; they developed smaller, more difficult-to-ride saddles; and they began to put the messages on thin, light-weight paper (that ripped more easily). Because we’re experienced horse riders, we could probably cope with these kinds of technical problems. Our jobs became a bit more difficult but coped with it.

[Image on screen: mailbags being loaded into a railway carriage]

Now imagine that the railway arrives and almost overnight the service we provide becomes redundant. No matter what kinds of technical changes we implemented, this game has fundamentally changed. No matter how much we love horses or love our job, the adaptive challenge is clear: we either adapt or die. We need to learn Morse code, or become a telegraph operator or an engineer on the railroad, or we become irrelevant and extinct.

This is exactly what happened to the real Pony Express. Do you know how long that service operated for in the Wild West?

[Participants guess: 'Ten years?' 'Five?']

18 months. Despite how large The Pony Express looms in tales of the Wild West, by the time it was established, the end was already in sight, as railway tracks were being laid across the western United States.

Now imagine your teachers have been Pony Express riders for twenty years and the innovative learning environments you have developed require them to put away their ponies and learn to work on the railroad—almost overnight. No wonder they're having a hard time making the change.

I use the story of The Pony Express during workshops because it illustrates how challenging and emotional second-order change can be: people who experience this kind of change often find it an emotional and personal challenge. Linsky referred to adaptive change as being "the distribution of loss" (Linsky, 2009, para. 6), noting that people who are more attached to established practices tend to feel a greater sense of loss and grief than those who are less attached to them. If The Pony Express was simply a way to pay the bills (and not a reflection of personal value), a rider is not going to feel the loss as keenly as someone who has lived and breathed horses their whole lives.

In workshops, I often give audiences a set of examples of change that are more closer related to education, as outlined in Table 4.2.

Table 4.2.

Examples of First- and Second-order Change in Schools

First-order problems	**Second-order challenges**
• Moving from using paper to electronic portfolios for reporting • Thematic studies instead of single learning area units	• Moving from year-level groupings to completely vertical arrangement of students • Innovative learning environments

• Multi-level classes • Moving from teaching Year 3 to teaching Year 3 and 4 in a composite class • A new principal arriving	and co-teaching • Project-based learning instead of a subject-based curriculum • Distributed rather than top-down leadership

Each of the examples of change in the right-hand column looks daunting.

When I reveal to audiences that these 'hypothetical' examples of change are not hypothetical at all: they are the programmes we implemented when opening Ōkahukura College: all at once; all on day one. There's often an audible intake of breath when people consider the scale of the change people must have been going through. No wonder those teachers found the first few weeks difficult, emotional and stressful. No wonder the staff convened a 'crisis meeting': we were all in profoundly second-order change.

Another important point Waters et al. make is that the same change can be experienced as both first-order and second-order by different people:

> That is, if a change has first-order implications for one person or group of individuals, yet has second-order implications for another person or group, this latter group may view the change as a problem rather than a solution. (Waters et al., 2003, p. 7)

An example of this is that when I joined Ōkahukura College, I had a reasonable amount of project-based learning experience. For me, that element of the programme was more of a first-order problem; for people who had never taught in a project-based fashion before, the challenge would have been second-order. Depending on how we were experiencing the change, our support needs would be correspondingly different. Chapter 5 explores further the way a leader can adjust the support they provide, based on whether staff are experiencing change as being first- or second-order.

In order to ensure an organisation has the capacity and capability to cope with ongoing adaptive challenges, Heifetz et al. argued that leaders should develop "adaptive leadership" which they define as "leadership for complex, multifaceted contexts and challenges in times of change" (Heifetz et al., 2009). When school leaders employ adaptive leadership approaches, their schools develop higher levels of adaptive *capacity* or "the capacity of systems to engage in problem-defining and problem-solving work in the midst of adaptive pressures and the resulting disequilibrium" (Heifetz et al., 2009, p.

303). Because transitioning from traditional architecture to innovative learning environments is considered second-order change for many schools, adaptive leadership and the development of high levels of adaptive capacity are essential for a successful implementation (Campbell-Evans, Gray, & Leggett, 2014, p. 542). In order for organisations to develop these high levels of adaptive capacity, leaders should consistently engage in the following five features of adaptive leadership.

Firstly, elephants in the room should be named. These *nondiscussables*—issues everyone is aware of but no-one has the courage to mention—should be minimised so all members of an organisation feel empowered to critique mindsets and practices; to confront areas of complacency, and to ask questions that need to be asked (Osborne, 2016, p. 12). Heifetz argues that, while in adaptive organisations "no issue is too sensitive to be raised at the official meeting, and no questions are off-limits" (Heifetz et al., 2009, p. 102), in less candid organisations, each meeting is preceded by 'pre-meeting meetings' and followed by 'meetings after the meeting' where participants discuss what really happened in the meeting but which wasn't openly acknowledged or discussed. These practices, they argue, limit an organisation's ability to respond well to change.

In "The Culture Builder" Barth argued that "the health of a school is inversely proportional to the number of nondiscussables" (Barth, 2002, p. 8): the fewer nondiscussables; the healthier (and more adaptive) the culture. Raising nondiscussables is particularly challenging in change processes where participants feel the development is a pet project for senior leaders or 'the principal's baby.' Leaders need to be aware that people may fear 'naming the elephant' or speaking candidly because of the principal's ability to punish or censure dissenters: this kind of silence may not be golden.

When elephants in the room are not named, they can't be addressed. If one or more parties is unaware that a problem exists, they can't be a part of developing a solution to it. To help people see these potential areas of hidden conflict between team mates, I provide workshop participants with examples such as "If you don't tell me you don't like my smelly tuna lunch in the microwave how am I to know?" or 'I smile when you bang the bongo drums when it's time to transition, but really I hate that sound'. These 'safe' examples are often followed by more challenging examples: we each have a variable level of tolerance for noise within learning environments; you often turn a blind eye to disruptive student behaviour—expecting me to deal with it; or none of us appears to feel a sense of ownership for the environment when it comes to keeping it orderly or clean—it's a mess every day. Barth argued that organisations are full of these kinds of "landmines and tripwires" (Barth, 2006, p. 9) which we are desperate to avoid because they can create conflict. If we address them however, Barth argued, they cease to be landmines.

During a session with a group of middle leaders, we identified a big landmine: one leader's team was becoming increasingly frustrated that, at the end of the day, one teacher would sit in the teaching space on her laptop completing other tasks while team members around her would pack away resources, putting them in their rightful place, returning furniture to agreed locations and undertaking other end-of-day tasks. The team had labelled this staff member as lazy and the issue had become such an elephant in the room that it was now too challenging for them to confront dispassionately. The team should have resolved this issue as early as they could (possibly through the development of group norms and clarity around roles and responsibilities) so that it could be put to bed before it became a big issue. However, the elephant had grown and the team member at the centre of it was probably unaware of the tension she was causing; it was likely she felt the jobs she was completing on her laptop were very important as well. As I discussed the issue with the team leader I realised it was a literal example of the phenomenon Barth described:

> Everyone knows that this huge pachyderm is there, right between the sofa and the fireplace, but we go on mopping and dusting and vacuuming around it as if it did not exist. (Barth, 2002, p. 8)

Senior leadership teams perform a vital role in making it safe to name elephants in the room so that learning can occur. Heifetz et al. remind leaders that "people at the top of an organization are always sending out clues that indicate what behavior is acceptable" (Heifetz et al., 2009, p. 167). If school leaders don't name elephants in the room, they can't expect reflection and continuous learning to take place in their organisations.

In order to facilitate constructive dialogue between staff members on topics that matter, one school I worked with developed an approach whereby certain phrases were deliberately used by senior leadership to give staff a 'safe phrase' or code word to use when wanting to discuss a particularly tricky issue. Having talked to staff about the importance of collective accountability and not turning a blind eye when the agreed-to standards were not being met, senior leadership began to deliberately use the phrase, "In the interests of not turning a blind eye...” When that phrase was used, it was a cue to the other party that an important conversation was about to follow. The school also developed protocols for making those conversations safe: if there was not enough time available to do the conversation justice, or a participant was not in the right head-space to engage, both parties could agree to set another time for the conversation in order to ensure they wouldn’t get too busy to follow up and resolve the issue.

Correctly identifying (and resolving) elephants in the room is an essential practice associated with Heifetz’s second feature of adaptive organisations: they ensure reflection and continuous learning are institutionalised. The learning and growth that occur when difficult issues are raised and resolved strengthens teams and normalises the asking of difficult reflective questions. When leaders encourage reflection they are also encouraging smart risk-taking, prototyping and experimentation—all essential practices for knowledge-building. When leaders find appreciative ways to ensure reflection and continuous learning are institutionalised, they achieve three concurrent benefits:

- they build confidence and self-belief in staff by acknowledging what is working well;
- they build a sense of urgency around things that are not currently as we want them to be; and
- they build an individual’s evaluative capacity as well as their affective commitment to the organisation.

According to Heifetz et al. (2009), the third feature of organisations with high adaptive capacity is that responsibility for the organisation is shared: teams seek to achieve not only their own goals, but also to lend assistance and effort to help others to achieve theirs. The traditional pyramid organisational hierarchy often creates discrete functional units and rigid lines of accountability: which decreases the need for collective responsibility. In contrast, when organisations are structured like networks, each unit is connected to others, facilitating the exchange of information, the shared ownership of problems and generation of collective insights.

Kotter argues that, in a slow-moving world, a ‘lone-ranger boss’ (at the top of a pyramid hierarchy) can approach problems by talking to various people, considering options, going back to them for more information, making a decision then communicating it back to staff who then implement the decision, in what Kotter refers to as a “sequential and orderly” fashion (Kotter, 1996, p. 55). In a faster-moving world, however, this ponderous and linear process is too cumbersome to be useful: networked teams who are empowered to make decisions and act on real-time information outstrip the effectiveness of lone-ranger bosses and siloed organisational structures. These adaptive, networked structures help teams to navigate through adaptive change because they are better suited to the key adaptive challenge of finding and sharing promising new approaches.

A fourth feature of organisations with high adaptive capacity is that they encourage independent judgement. To develop this capability, Heifetz et al. advocate that "people in authority do what only they can do and make decisions only they can make. Other tasks and decisions are handled by others capable of doing so" (Heifetz et al., 2009, p. 169). This approach might simply sound like delegation, but one of the benefits of increasing independent judgement capability is that intelligent decision-making capacity increases across the organisation.

The fifth and final feature of organisations with high adaptive capacity is that they develop leadership capacity. In most cases, this means leaders develop a pipeline of leadership talent to avoid potential bottlenecks created by a lack of leadership potential in junior team members. Several of the schools with whom I work have established 'Aspiring Leader' programmes for those currently in middle leadership roles as well as those who want to take one up in the future. We often centre these programmes on the five expectations commonly placed on middle leaders: being a teacher leader, developing teams, maintaining relationships, pedagogical leadership and undertaking administration tasks effectively (Shaw, 2016).

Much of this adaptive capacity work is about keeping organisations in a productive zone of disequilibrium (Heifetz et al., 2009, p. 306): not feeling complacent about the need to change, but not feeling overwhelmed by the need to change either.

4.2.5 Provide timely and useful information

"It was a disaster. We're not doing that again."

It's 10am and I'm meeting with a leadership team who are opening a new school. They recently held an evening to share the vision and values of their new school with the community and I'm keen to hear how it went. Not well, as it turns out. A small group of parents had taken the opportunity of having several Ministry of Education officials in the room to hijack the meeting and push their particular agenda: expressing dissatisfaction about changes in the school enrolment zone. The leadership team, initially excited by the prospect of presenting their vision to families, eventually gave up in exasperation as interruption after interruption redirected the conversation back to the enrolment zone. The team was trying to provide the community with up-to-date information about the progress the school was making in order to gain their confidence. The message they wanted to communicate was that preparations were well in hand. By the end of the evening the leadership team were back to the drawing board.

The team's intentions were excellent; they were trying to make use of *social information processing theory* which holds that when information provided by an organisation is timely, useful, and adequately answers people's questions about a change, anxiety about that change decreases (Miller & Monge, 1985, p. 370). When communicating information about a change, the perceived quality of that information also affects participants' openness to change (Miller, Johnson, & Grau, 1994). Unfortunately for the team opening the new school, the assembled community was unable to test the quality of the information they were receiving because of the actions of those who hijacked the meeting. The information the community received did nothing to decrease potential anxiety about the new school—if anything community anxiety increased. No wonder the team were so frustrated.

It was a similar situation that led to an emergency email I received from a deputy principal in a school with whom I had worked in the past. A delegation of parents had approached this leader unhappy with how things were going in what the school called their 'modern learning environments.' The parents had apparently been sharing their concerns with each other on a private Facebook group and had decided amongst themselves that things had to change. The school acknowledged they had a group of students whose behaviour was particularly problematic and disruptive of the learning of others. The school had done a lot of things right, including working with the Ministry of Education on developing a plan to improve the behaviour of those students, but the parents of others in the same innovative learning environment were quick to attribute the problematic behaviour to the design of the physical environment and the way it was being used.

When I met with the deputy principal to talk about how to respond to the parents' concerns, we both realised that we felt that, in the early days of the school's ILE development, they had done a very good job of keeping the community informed and involved through a series of consultation hui[6], board of trustees sessions, newsletters and other forms of communication. It dawned on us that as four years had passed since the original ILE development took place—and in a Year 1–6 school—potentially half of the original audience had moved on as their children graduated, meaning much of the current school community hadn't been involved in the original consultation and information sharing.

The situation also connected with what I had been reading about Trope and Liberman's *construal-level theory of psychological distance* which holds that the more distant a place, time or concept is from a person, the more abstract it will seem to them (Trope & Liberman, 2010, p. 440). As this school had implemented innovative learning environments with Year 4–6 students, any parents whose children were in their first few years of school may have felt they were so far away that it was an abstract concept and they therefore did not fully engage with the consultation and communication processes the school offered.

The deputy principal and I decided to run a series of parent information sessions so people who had not been part of the school community originally (or had been but hadn't engaged) when the initial communication had occurred could feel they had the information they needed. We took Miller and Monge's (1985) guiding principle of providing timely and useful information that answered people's questions and structured the session around the school's vision for learning and we developed answers to a set of frequently asked questions that had been submitted by parents ahead of the session.

When parents began to ask questions during the session, we realised a common thread was the variety of practice taking place in the ILEs. Parents gave the example of one teacher who provided students with cubbyholes in which to store their personal possessions, a second provided tote trays; while a third felt that a communal sense of belonging and togetherness negated the need for dedicated personal space. "Which approach was the right one?" a parent asked. As the question was being asked, I noted my initial response to be, "Different practices are fine, as long as they align with guiding principles." As the parent continued to list the varied practices teachers were engaging in, I felt that initial reaction give way to a sense that the leadership team and I hadn't done enough to bring coherence to the practices happening in the ILEs ("Variety is fine, but is anything *consistent* between these spaces?") In the face of such varied

6 Meetings, workshops.

practice, it's understandable that parents might struggle to make sense of what was good and what wasn't.

At the heart of the question I discerned a feeling that the *reliability* of the information being provided by teachers was being questioned. Parents who were hearing there were three different ways to achieve an outcome may have felt—far from being reassured—that none of the teaching teams knew what they were doing and were therefore trying every different approach they could think of. After the session the deputy principal and I resolved to work harder to communicate to the community not only what the school was doing, but *why* they were doing it.

Mangahuia School was also committed to providing multiple, ongoing information evenings, even when they felt the community didn't need them or even want them. Principal Dmitri recalls:

> We had a lot of parents' evenings. Literally lots: we probably had 10 to 15 parent meetings. We held them at different times and not many people would turn up. But we still held them.

Despite low attendance, they continued to offer engagement opportunities because they knew that demonstrating their commitment to open, reliable communication was important to the development of parental trust in the change initiative.

I've also seen that when there is an absence of open communication and transparency, the result can be disastrous. This particular school had been through some difficult times and was in the process of rebuilding. I was originally brought into the project by the architects to help the school develop their site masterplan. In preparation for a visit to the school, I reviewed the project brief to get a sense of the back-story: a redevelopment that had been in the pipeline for some time had (for various reasons) been brought forward. The first concept drawings for a preliminary design had been sent down to the principal who put them up in the staffroom for a couple of weeks so staff could review them. Feedback, little of which was positive, was scribbled all over the drawings then sent back to the architects. The perceived shortcomings of the design were seized upon by anonymous commenters, in a feeding frenzy of negative feedback. The mood board of visualisations—intended to provoke thinking—drew together inspiration from primary schools, secondary schools and workplaces to give a wider perspective of what contemporary collaborative spaces looked like. One image of a 'Google-style' room within a room was slated by staff as a child's playhouse "not appropriate for a high school.” The written feedback had a barely concealed contempt that hinted at much deeper underlying issues, and I was invited to run a staff consultation session to further explore the designs.

The meeting was a challenge, but a significant moment occurred when a teacher called Chas spoke:

> **Workshop summary**: Chas was visibly confrontational when asking his question during Q&A. His eyes were narrow and looked out of the corner of his eye as he spoke. Talking slowly, with questions at the end of each statement the way an investigator might question a witness: “I’m an old dog, right? Right?! I’ve been around. I’ve seen this stuff come and go, yeah? All this open plan stuff we did in the seventies. My question to you is: ‘At what stage are we going to be included in the process? When are we going to have a say?’”
>
> The nods of agreement and murmurs between people showed that Chas wasn’t the only one feeling disconnected from the process. There was a real sense that people wanted to have their say; to contribute to the design, but hadn’t been asked to. It was actually an easy question to answer. I said to him and the rest of the staff, “Of course you as staff need to be involved; the sooner the better. That’s one of the most important parts of the process: you know your school, you know your students, your community and what kind of learning works best for them. You need to make sure the building you end up in is the best one for your needs.”
>
> I realised afterwards was that he knew the answer to his own question: he knew the staff needed to be involved. He just wanted the Senior Leadership team to hear the words come out of my mouth, not his.

The message behind Chas’s question was that an engagement process that consisted of pinning some preliminary drawings on a staffroom wall was not going to be sufficient from his perspective.

The tone of the meeting shifted from that point on. Hearing they were essential partners and contributors to the design, the body language of the staff—almost to a person—became visibly more relaxed and engaged. I also realised that the staff hadn’t had the process of iterative design explained to them. They didn’t realise that the process needed to begin with these early, expansive ideas as a means of determining what they collectively did and didn’t want. These high-level concepts were designed to stretch their imagination, to break them free of ‘what is’ and to begin to think about ‘what might be.’ Not all of these ideas would make it into the final design, but through the process of concept, preliminary then detailed design, the right solution would be arrived at. But the staff didn't know this.

A framework I use with schools to help facilitate meaningful engagement with staff, students and community in situations like these is 'The Spectrum of Public Participation.' I remember a facilitator friend of mine explaining it to me:

> **Transcript**: There's a time and place to tell people what's going on; of *informing* them: "The meeting is happening at 5pm on Tuesday. Sports Day is the 23rd of September this year." This kind of communication is vital to make sure everyone knows what's happening, when and why. But if all your communication about something important like a change process is informing or 'letting people know how it's going to be' they are going to get annoyed eventually about how one-way the communication is. Imagine going to a community and saying "We've updated the school vision. Here's the new one. This is what's important to us now." There would probably be quite a few unhappy people; some who liked the old vision and wanted to keep it; and some who disagree with the new one and want a different one. So rather than informing them how it's going to be, you should probably consult them, or collaborate on a new vision statement. The problem is that when you consult people or collaborate with them, it takes time. It's decision by committee and the process takes a lot longer. You wouldn't do it for deciding what day sports day is going to be on because you'd never get an answer that pleased everyone. Think of it like investing. Financial planners always advise their clients against investing only in high risk or low risk investments. Participation is the same: if you only operate at one point of the spectrum, you'll get into trouble. What you have to do is spread opportunities to participate right across the spectrum so most people are happy most of the time.

There are five points on the spectrum of public participation.

- Inform: tell people what is happening.
- Consult: obtain feedback on proposed decisions.
- Involve: collect stakeholder feedback to ensure concerns are understood and considered.
- Collaborate: partner with stakeholders to develop alternatives and identify a preferred solution.
- Empower: give people the opportunity to make key decisions which are then implemented by the organisation's leaders (Nelimarkka et al., 2014).

Examples of how the spectrum might work when applied to learning environments are outlined in Table 4.3.

Table 4.3.

Examples of Participation Using the Spectrum of Public Participation

Inform	Consult	Involve	Collaborate	Empower
We're building ILEs, and this is when it will happen. Any questions about the timeline?	These are two draft building designs; which should we develop further?	Should we develop collaborative spaces or not? Why?	What kinds of learning zones would you like to see in our new building?	We want environments that support our vision for learning. What should we build?

Operating at either end of the spectrum (dictating or deferring) presents challenges for leaders: people don't like change being 'done to them' but neither do they like being consulted on every single detail. Effective leaders think carefully about the decisions that need to be made, and where those decisions need to sit along the spectrum. Ōpapa School's engagement plan was based on the spectrum of public participation and was so successful that Principal Klaus continues to use this approach with his leadership team today. When a decision is required, Klaus asks "Where on the continuum do we need to put this?"

As important as the provision of participation opportunities is the way these opportunities are conducted and facilitated. If the engagement process is undertaken in such a way that 'worst case scenario' voices are amplified, the process may take negative sentiment and resistance from the fringes of the community and inadvertently develop support for them in the mainstream. An example of this occurred when I was discussing the features of innovative learning environments with a group of teachers. I talked about the research-based principle that heating, lighting, ventilation and acoustics should be optimal in a building, and noted that ILEs often make good use of internal glazing to ensure the internal environmental quality is good. One teacher asked "What if there is an active shooter on the campus? All these glass walls in the building will make it easier for the shooter to kill students." The heads turning sideways were as astonished at this question as I was. It was an idea that was so fringe it hadn't entered people's heads, but I had just given it public airtime. This was an example of how the loudest voice in a room can assume an asymmetrical position of importance in such forums.

To empower all voices, principals should consider employing a range of different formats for engagement events. Information evenings can provide explanations from experts, the school or researchers and a sense of what changes the initiative is likely to mean for students and parents. The flow of information is primarily from the expert and school to the community, but at points during the evening, sticky notes or large sheets of paper can be used to gather parent questions. These questions can then be collated, themes identified and considered, answers researched, and honest responses developed and communicated using the various communication channels the school has available to them.

A colleague once shared with me the carefully developed engagement plan her school had developed to seek parent voice on an issue that was likely to be contentious. Their plan followed the process outlined above: presentation, small groups, gather questions, collate and share answers. The process was going well until one of the senior leaders, either forgot the plan or by force of habit asked, "Does anyone have any questions?" The carefully managed question collation activity was immediately replaced by parents feeding off each other's anxiety asking question after question in an open forum. Questions that were increasingly focused on 'worst case scenarios.' The principal later confided to me that given the damage that had been sustained by the deviation from the original plan, it would have been better if the whole evening had never taken place.

The principles thus far outlined in this chapter relate to the actions that can prepare *an organisation* for change. While these institution-, implementation- or systems-level considerations are important, a number of researchers suggest an over-reliance on these macro-level factors may lead to organisations being unable to achieve the intended aims of their change (Herscovitch & Meyer, 2002, p. 484; Meyer, Srinivas, Lal, & Topolnytsky, 2007, p. 206; Weeks, Roberts, Chonko, & Jones, 2004, p. 13). These researchers caution against under-investment in micro-level (individual or employee-level) elements when preparing for change. The second half of this chapter covers considerations related to preparing *individuals* to engage with change, because, as has already been noted:

> Organizations only change and act through their members, and successful change will persist over the long term only when individuals alter their on-the-job behaviors in appropriate ways. (Choi, 2011, p. 480)

4.3 Develop the capabilities to engage with change

If organisations do indeed only change through the actions of their members, those members need to be ready, willing and able to engage with change. Vakola suggests a range of actions leaders can undertake to achieve this readiness:

> Getting members directly involved in understanding the need for change, engaging members in understanding their own situation, creating ownership of the design and implementation phase, and involving members in the decision-making process. (Vakola, 2013, p. 99)

In addition to the high-level principles offered by Vakola, current research offers more detailed insights into how individual capability can best be developed, beginning with fostering constructive attitudes towards change.

4.3.1 Attitudes toward change

Many researchers have studied participants' attitudes towards change and their respective impacts on adoption or rejection behaviours. Myungweon Choi's (2011) literature review summarises these various constructs well, and suggests that, as these constructs are susceptible to situational variables and change over time, they are better conceptualised as *states* rather than as *personality traits*: malleable rather than fixed. Vakola also sees an individual's preparedness to change as being "a malleable trait based on psychological predispositions and...shaped by the organizational and change context" (Vakola, 2013, p. 98). These findings offer clear implications for leaders, the most significant of which is that the leader's actions can directly influence an employee's level of commitment to changes being proposed.

Choi's meta-analysis identifies three key attitudes to change that can potentially act as antecedents for increased employee commitment to change:

- readiness for change;
- openness to change; and
- cynicism towards change (Choi, 2011, p. 488).

4.3.1.1 Readiness for change

> Readiness is all.
>
> —Shakespeare, *Hamlet*

Vakola observes that "readiness for change" can refer to two different concepts:

perceived and actual *organisational* readiness to change, and *individual* readiness for change (Vakola, 2013, p. 97). Madsen et al. assert that “employees who are change-ready hold a sound understanding of the change and why it is important to the organisation” (Madsen, Miller, & John, 2005, cited in McKay et al., 2013, p. 31), but true change-readiness requires more than just knowledge of an initiative.

Choi defines readiness for change as being “the cognitive precursor to the behavior of either resistance to, or support for, a change effort” (Choi, 2011, p. 480). In other words, it’s the lead-up to an individual deciding whether they’re going to support a change or resist it. The key finding from Choi’s meta-analysis is that an employee’s readiness for change increases (and their resistance to change decreases) when they believe:

- the change is needed;
- the change will be beneficial;
- the proposed change is appropriate for the challenge at hand; and
- the organisation has the capacity to successfully implement the change (Choi, 2011, p. 482).

The more *change ready* individuals are, the more they are likely to be committed to change and the less likely they are exhibit resistance behaviours (Armenakis, Harris, & Mossholder, 1993).

Examining each of these antecedents in turn, the establishment of a compelling story for the change, so that participants see “the point of the change” and have a “belief that change is needed” (Aiken & Keller, 2009, p. 2) is essential. Eby et al. found that readiness for change is increased if individuals believe that a change is “both necessary and likely to be successful” (Eby, Adams, Russell, & Gaby, 2000, p. 422).

Workshop transcript: “The first question we need to be able to answer when we embark on a change journey is, ‘Why should I change?’ Without an answer to that question we often hold a very brittle commitment to the change and lack the energy to see that change through over the long haul. If we don’t know what was wrong with our previous practice, when times get difficult or stressful we’ll often revert back to the things we’re more comfortable and familiar with: those old practices. This is what’s known as ‘ceremonial compliance’ or doing something when someone is looking, but going back to what we’ve always done when they are not. Unsatisfying answers to the question ‘Why are we changing?’ include: ‘Because the Ministry is telling us to’; ‘Because the school down the road is doing it’ and

‘Because the Principal has decided it’s a good idea’. We need to have a deep-seated reason for ourselves in order to carry us through a change process.”

Establishing a compelling change story requires both positive and negative elements to the narrative, which Aiken and Keller (2009a, p. 6) argued ensures the narrative around change is not relentlessly focused on “what’s wrong.” This, they argued, leads to an unsustainable change story because it “invokes blame and creates fatigue and resistance, doing little to engage people’s passion and experience, and highlight their success” (Aiken & Keller, 2009, p. 6). Similarly an over-emphasis on the positive side of a change story “can lead to watered-down aspirations and impact” (Aiken & Keller, 2009, p. 6). A compelling change story for innovative learning environments might take the form of a narrative that says:

> Great pockets of practice exist throughout our school (+), *but* they are not being consistently or universally implemented (-). Our collaboration skills and ability to learn from each other continue to improve (+) *but* we’re missing opportunities to extend this every day (-). Many of our students are thriving in the learning environments we have (+), but not everyone can access the spaces they need to get their learning done (-).

Spending time at the beginning of a project to clearly define the proposed benefits of the change is also essential to establish a common definition of success, which serves as a framework for ongoing self review: “If these are the potential benefits, to what extent are we seeing them? Are we getting closer to them or further away, and how do we know?” Clearly defining success is also important to ensure that the myriad tacit benefits that might exist in each team member’s head are turned into common, explicit definition of benefits that are agreed to, and owned, by all. In the same way that the golden circle seeks to align individual values and beliefs to find common ground, coming to agreement on the potential benefits of a change avoids each member of a co-teaching team heading toward their own (possibly contradictory) measures of success.

A second condition that leads to increased change readiness is a belief that the change will be beneficial. Holt et al. identify two potential areas of benefit that can increase the readiness of participants: benefits to the individual themselves and “long-term benefits for the organization” (Holt et al., 2007, p. 237). When using this research with teachers, I’m careful to define benefits for the organisation in such a way that it includes what’s best for students. Having seen teachers turn a blind eye to school rules that would unnecessarily punish students (and done this myself), it's my belief that many teachers' commitment to their students is as great, if not greater, than their commitment to their organisation. Changes that are defined as being successful for the school but not students are unlikely to be widely supported.

Another factor that affects the magnitude of potential benefits for participants is again Trope and Liberman's concept of "psychological distance" (Trope & Liberman, 2010, p. 440). Benefits that are merely proposed (the kind of gains that research literature suggest *should* be possible) are not as powerful as benefits that are *realised* (gains that occur in participants' schools, which can be viewed first hand).

A decade ago, early studies began to point to empirical evidence of the impact the built environment can have on learning. Upitis (2009) noted that "research demonstrates that students are more likely to achieve high levels of academic performance if the schools they attend are well maintained, meet safety standards, and are kept clean" (p. 124), also noting that the quality of natural light in learning environments has a direct relationship with academic performance (p. 124). However the relative scarcity of such studies meant many schools with whom I worked changed their environments based on a hunch it would lead to better outcomes for teachers and students. As the research base strengthened, participants began to rely less on hunch and more on peer-reviewed studies that offered more robust evidence of proposed benefits of ILEs (Barrett, Zhang, Davies, & Barrett, 2015; Blackmore, Bateman, Loughlin et al. 2011; Imms & Byers, 2016; Imms, Mahat, Byers, & Murphy, 2017).

I came to realise the power of combining both *proposed* and *realised* benefits of ILEs when, during staff or parent meetings, people would listen to me discussing the research and ask "Yes, but that's not our school. How do we know it will work here?" I use the phrase *realised benefits* to describe those that manifest on the ground in schools as teachers trial ILEs and disseminate the benefits they experience. Even though Mangahuia School stumbled into their ILE development when two teachers left a set of sliding doors open after a meeting, Principal Dmitri was quick to identify the *realised* benefits from this inadvertent prototype: "After a week [the team] said 'Hang on. The kids are engaging differently. Do we need to shut these things [the doors]?'"

What Principal Dmitri and Mangahuia School found was consistent with what many other schools have found when exploring realised benefits: that ILEs offered both new solutions to old problems and new possibilities that were not previously available. Some of the old problems that schools were able to address included the following perennial challenges.

- The challenge of 'the reception classroom'. As students arrive for their first day at school through the school year, the new-entrant class grows to the point where it must be split in two. Principal Vikram describes his school's traditional approach to this problem:

  > Normally we take a group of kids and chuck them in a prefab by themselves with a teacher that's new to our school and it fails year after year. [In an ILE] we just put another teacher in and we'll just keep getting kids entering. They get 60 new entrants, three teachers across two classrooms and loved it. And it hummed.

- Providing support for relief teachers. Offering in-class support for supply teachers who may be asked to cope with tricky students 'trying it on' or who may be unsure about how the school handles certain situations. During one visit to Pukeiti School, Vikram said to me, "You know that reliever we just saw in the staffroom? I said to him 'Going well in your room, mate?' He said 'This open space stuff is great, because there's teachers around supporting me: I'm not by myself in my room.'"
- Improvements in student behaviour. Pukeiti School found

  > Having our senior syndicate in one space—all teaching together—has made a significant difference. So far… [knocks on the desk] I haven't had a stand down[7]. Other years I'd be standing down two to three kids a term.

- Potential variability between the teaching classes receive. "It doesn't matter if we have Mr [X] or Mrs [Y] as a teacher. It shouldn't it matter. In fact you're going to have them both!"
- Teacher job satisfaction and retention. Principal Vikram reported, particularly younger, teachers saying to him "It's so bloody lonely, in a single class. I haven't got the ability to share issues. I hate being down here by myself?" When placed into a collaborative environment the same teacher, having considered leaving the profession: "She's just beaming you know? And absolutely in love with teaching again."
- Improving teacher quality. Vikram described the experience of a teacher who

7 Disciplinary action requiring students to remain away from school for a period of time.

was struggling in her class: “She’s now teaching well. She’s in amongst three experienced teachers, seeing good teaching modelled all day, every day.”

In addition to providing potential solutions to these existing problems, schools have also found ILEs can offer possibilities that were not previously available.

- In-class mentoring for beginning teachers. Where traditionally beginning teachers have been on their own in their classrooms with some release time to prepare and meet with their tutor teachers, ILEs offer the opportunity for these early-career teachers to work alongside experienced professionals, learning constantly throughout the day. As Principal Vikram says: “[It’s] far better than what we do now: chuck them in a classroom, tell them to survive for three or four weeks. [What we do now] is a really good model for beginning teachers.”
- Working smarter not harder. Traditionally teachers have had to differentiate activities for the range of learning levels in their class while next door another teacher is doing almost exactly the same thing. ILEs offer teachers opportunities to ‘divide and conquer’: to be much more efficient and strategic in the planning and delivery of differentiated activities. The decreased planning and teaching workload lead to increased support for the change from staff: “People think, ‘Actually you’re taking work off us.’”

When the benefits of a change are both proposed and realised they can significantly increase participants’ levels of commitment to change, but the benefits also need to be communicated widely throughout the community. If they are not, the potential for resistance increases, as I found out at Whangamā School.

The leadership at Whangamā School held a series of three parent engagement sessions on the same night so that people with commitments might be able to at least attend one session throughout the afternoon and evening. A mother and father team who were vocal opponents of the direction in which the school was moving attended two of the three sessions independently of each other. By attending two of the three sessions they ensured their concerns were heard by the widest possible audience.

During the first session, the mother asked a set of very pointed questions about their eldest child’s experience in the school’s ILEs; a set of questions that was repeated almost word for word in the second session by the father. They felt their eldest child couldn’t cope with the “distraction and noise” in the school’s ILE and had requested a special plan be put in place for the child. This was done, but the parents eventually made the decision to withdraw their child and enrol them in a private school in a neighbouring suburb. The initial criticism of the school based on the eldest child's experience became much more complicated when the parents acknowledged that their youngest child had thrived in the new environments: the child's learning had progressed well, and they had won a number of school awards in different areas.

The audiences listening to these two conversations play out might be forgiven for thinking success in the new environments was a hit-and-miss affair: one child had thrived while another had not; it was the luck of the draw. The implication I took away from the sessions was that the school and I needed to do a better job of communicating both the proposed and realised benefits of the new environments. Had we done so, the parents who attended the sessions would have realised that one child's unsatisfactory experience (while concerning) was a not part of a wider trend.

A third condition identified by Choi that can increase participants' level of change readiness is the change needs to be seen as being appropriate for the challenge at hand: "appropriateness focuses on if the specific change is adequate for the organization and if individuals agree with it" (Neves, 2009, p. 217). Closely aligned to the persistent principle that change should align with organisational and individual values and beliefs, Parish et al. found that when employees understand "how any change implementation fits with the firm's larger strategic picture" they are more likely to be committed to that change (Turner Parish, Cadwallader, & Busch, 2008, p. 45).

Changes that employees don't consider to be appropriate for their organisation are considered to be 'low cultural fit' (Canato, Ravasi, & Phillips, 2013, p. 1724). Canato et al. caution that, when this occurs, the "new practices' lack of fit with cultural values may result in organization members experiencing significant tension and lead them to resist the coercive implementation of the new practices" (Canato et al., 2013, p. 1725).

According to Choi (2011), the fourth and final condition that affects participants' levels of readiness for change is the perceived ability of the organisation and individuals to successfully implement the change; a factor known as *change self-efficacy* (Herold, Fedor, & Caldwell, 2007, p. 943). Employees with high levels of change self-efficacy are not only more likely to be committed to a change—even when there is a high level of turbulence within the organisation—they experience that change as being "less stressful, onerous, or threatening than less efficacious people" (Herold et al., 2007, p. 943). Two important implications for leaders emerge from this finding: firstly, the more incremental a change is, the greater the likelihood participants will find success and therefore increased levels of change self-efficacy. The second implication for leaders is based on Herold et al.'s finding that:

> The degree to which a particular change taxes individuals' adaptation resources may well be a function of the extent to which such resources are already being consumed in adapting to other, ongoing environmental events (Herold et al., 2007, p. 944)

In other words: the greater the number of concurrent changes occurring in an organisation, the more these changes tax levels of change self-efficacy. Leaders should carefully consider how many change initiatives a school is currently undertaking before embarking on more.

4.3.1.2 Openness to change

Choi defines openness to change as an individual's "willingness to accommodate and accept change" (Choi, 2011, p. 486). Wanberg and Banas suggest that two sets of variables impact on people's openness to change: individual-difference variables: self-esteem, optimism, perceived control; and context-specific variables: information, participation, and social support (Wanberg & Banas, 2000, p. 133). These two sets of variables have been used as high-level structural elements in the conceptual framework: 'capabilities' (individual-level) and 'conditions' (context-specific). Wanberg also notes that context-specific variables are "potentially more malleable or responsive to organisational intervention efforts" than those related to the disposition or personality of participants. Leaders, therefore, will probably have more success if they focus on changing their organisation rather than their people.

Other factors that contribute to an individual's openness to change include high levels of change self-efficacy, internal locus of control, personal resilience (Wanberg & Banas, 2000) and need for achievement (Miller et al., 1994).

Choi observes that:

> When employees are well-informed about their role and the goings-on within the organization in the initial stage of change and when they feel included in the task and the social information network, they are likely to be open to change. (Choi, 2011, p. 486)

Being well-informed and included in the tasks associated with change affirm other principles in the conceptual framework, particularly those associated with the building of trust (including perceived integrity and honesty) and the persistent principle of participation.

4.3.2 Cynicism towards change

It seems a truism that the opposite of readiness for, and openness to, change is cynicism towards change, but researchers treat these as separate attitudes rather than two ends of a spectrum. It might also seem a truism that individuals who demonstrate high levels of cynicism toward change are less likely to embrace new practices, but the more interesting aspects of this area of the literature are what researchers have identified as the causes of cynicism towards change.

Cole, Bruch, and Vogel note that cynicism towards change most often arises out of "an individual's employment experiences" (Cole et al., 2006, p. 465). These employment experiences include disillusionment following the way expectations are developed, and feelings of disappointment when those expectations are not met (Andersson, 1996, p. 1404). To explore Andersson's three features further, consider a school that has embarked on a number of change projects over several years in an attempt to raise student achievement: formative assessment, visible learning, culturally responsive pedagogies, education for sustainability and flipped learning. If school leaders had proclaimed each subsequent intervention as the new silver bullet in the fight to raise student achievement but they had also poorly implemented each initiative, staff would understandably feel a growing sense of disillusionment as the challenge continued to persist despite initiative after initiative. If a further programme was unveiled, staff resistance to it as a result of their collective cynicism would be inevitable. How an organisation has gone about implementing change in the past (and the success they have experienced with that change) is just as big an influence over the success of future changes as the initiative being proposed. When it comes to change, success breeds success and failure breeds cynicism.

Related specifically to the development of innovative learning environments, Woolner et al. note that cynicism towards change can affect an employee's adoption, adaption and rejection behaviours, giving rise to a situation whereby "it is possible … for physical [environment] innovation to be enacted but ignored and so fail to influence teaching and learning practices" (Woolner, McCarter, Wall, & Higgins, 2012, p. 5).

Related to the concept of cynicism towards change is organisational cynicism which

Dean et al. define as having three dimensions:

1. a belief that the organisation lacks integrity;
2. negative affect toward the organisation; and
3. tendencies to disparaging and critical behaviours toward the organisation (Dean, Brandes, & Dharwadkar, 1998, p. 345).

Cynicism towards the organisation within which one is an employee has an impact on the way one views the change initiatives proposed by those organisations, which is a good reminder to leaders that high levels of affective commitment to an organisation will lead to an increased likelihood that change will be successful. These two principles are interdependent.

When considering the three attitudinal constructs outlined above (readiness, openness and cynicism), complexity is added by reminding us there may be different levels of readiness for change depending on whether one looks at individuals (the micro-level), groups and teams (the meso-level) or the organisation as a whole (the macro-level) (Holt & Vardaman, 2013).

Vakola notes a lack of clarity in existing literature surrounding analysis of the various contributions macro-, meso- and micro factors make towards successful change implementations, noting that research often aggregates the three together (Vakola, 2013, p. 10). For instance, if the whole organisation has a sound change leadership plan, sufficient resources and budget and a belief at the Board of Trustees and senior leadership level, one might consider the organisation to be well-placed to successfully implement the change. But if the classroom practitioners don't see the change as being needed, or don't feel they have the capacity to implement the change, it is unlikely to be successful. Similarly if an 'open' and 'ready' individual sits within a pessimistic or cynical team, they are less likely to be successful in their implementation of that change. In order to be successful, change leaders should build the readiness and openness of the whole organisation, not just individuals or teams.

4.3.3 Generate a sense of urgency

8:12am Friday, flying over Waikato, New Zealand. I'm scrolling through my newsreader when an article catches my eye:

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"The Physics of Innovation
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According to Newton's law of inertia any body prefers to remain in its present state, and will continue to move (or not) as it has been, unless disturbed sufficiently to be forced – literally – to change direction.

What we were taught in high school science, F = MA, force = mass times acceleration, also describes the physics of innovation. The laws of innovation may be an entirely different application than Newton intended, but tracking through on the metaphor yields pragmatic tips for innovators.

Innovation faces the inertia of the status quo defined by team members, organization culture, and whatever product or service solutions already exist. These all become anchors for evaluating the desirability of anything new. Every member of a team in any organization brings with them some version of 'the way things have always been done.' Users have ways they are solving the problems innovations claim to address." (Radin, 2018)

I'd never thought about how the concept of inertia relates to innovation and the status quo: in my mind the status quo has always been fixed and immobile, but it's more accurate to see it as having an inertia of its own. The current reality is not the absence of action; it's just action that may be moving in a direction that is different from that of an organisation's aspirational future. This observation helped me to make sense of why the pull of the status quo is so powerful in some situations. In order to effect change, leaders must not only establish a new direction, but also act against the inertia of the direction in which the organisation is currently moving.

In the preface to Kotter's Leading Change, Linda Burgess points out that:

> In highlighting the need to foster a sense of urgency to drive change, Kotter shows how a shortfall in an early phase of his eight-part process can foreshadow failure later on. (Kotter, 1996, p. i)

This driving force for change—what Kotter calls a sense of urgency—Isern and Pung refer to as the product of leaders "mobilizing the flow of energy and ideas needed to drive the organization forward" (Isern & Pung, 2007, p. 2). "Allowing too much complacency" is one of eight change mistakes Kotter sees as common to transformation efforts, the cause of which he attributes to factors which include:

- a lack of sufficient performance feedback from external sources;
- too much happy talk from senior management;
- the absence of a major and visible crisis.

Kotter cautions that urgency is not the same as anxiety. He argues that excessive anxiety can "push people even deeper into their foxholes and create even more resistance to change" (Kotter, 1996, p. 5).

To demonstrate how the absence of a major and visible crisis can hamstring change efforts, it's useful to look at the difficulty the New Zealand Ministry of Education has had in trying to improve the educational outcomes of students known as *priority learners* in New Zealand. This label refers to "groups of students who have been identified as historically not experiencing success in the New Zealand schooling system" (Education Review Office, 2012, p. 4), and while reports such as "Accelerating the Progress of Priority Learners in Primary Schools" outline approaches schools can take to address this persistent underachievement, the Education Review Office has found "most schools [have] yet to develop an effective approach to accelerating learning" for these students (Education Review Office, 2013, p. 22). Adaptive challenges like implementing innovative learning environments also benefit from the generation of a sense of urgency.

4.3.3.1 The burning platform

When working with a group of principals some years ago I introduced the concept of *the burning platform* as a metaphor to convey a sense of urgency.

> **Workshop transcript**: "The story of the burning platform has come to be a metaphor for the importance of having a compelling reason to change (Connor, 2012). Some of you may remember that back in 1988 an oil rig in the North Sea called Piper Alpha exploded and caught fire. One of the

managers on the rig was a guy by the name of Andy Mochan. He was below deck when the explosion occurred but got up on deck as quickly as he could. The scene that greeted him was horrific: the rig was on fire with explosions going off. He knew he needed to do something so he went to the side of the platform and looked over. Behind him the platform was on fire, and below him—eleven stories below—was the icy cold North Sea. To add to his troubles, the sea was covered in oil that was leaking from the platform, and that oil was *on fire*. So Andy's decision was: "Do I stay on the oil rig, on the burning platform, or do I jump eleven stories into the sea below?"

Andy chose to jump... [Pause for effect] ...and he survived. He was picked up a mile and a half from the rig and taken to hospital. During a press conference talking about his ordeal, a reporter asked him if it was difficult for him to make the decision to jump or not. "The decision was made for me," Andy said "It was either fry or jump. So I jumped." (ITN, 1988)

Andy felt he could no longer remain where he currently was; he had to jump, and the burning platform has come to be a metaphor for this in organisations. In schools, some burning platforms are easy to spot: declining achievement or increased truancy. In these situations, people must change: there's no way things can continue. However, generating a sense of urgency is more difficult when there isn't an obvious burning platform. In those situations, I tell leaders that the burning platform is usually there somewhere, it's just not obvious. You might have to go looking for it: ask students how happy they are at school; about their levels of creativity or critical thinking; about how much control they feel they have over their learning. The answer to these questions might affirm the approaches you're taking, but they might also reveal a burning platform that will be useful to generate a sense of urgency for change: jump or fry.

In conversation with this group of principals, I linked the burning platform story to John Kotter's observation that:

> By far the biggest mistake people make when trying to change organizations is to plunge ahead without establishing a high enough sense of urgency in fellow managers and employees. This error is fatal because transformations always fail to achieve their objectives when complacency levels are high. (Kotter, 1996, p. 4)

I pointed out that Kotter's argument is that if there is nothing compelling people to change, many will feel comfortable maintaining the status quo. One experienced principal in the audience took exception to the metaphor and asked whether "getting people panicked" with a burning platform was useful. I noted Kotter's point that a certain amount of energy for change is useful but anxiety or panic can "push people even deeper into their foxholes" (Kotter, 1996, p. 5). Urgency is different and can be an important motivator. The principal contended that somewhere in the middle: "perhaps a lukewarm platform" might be a good middle ground between complacency and panic.

Over lunch one of the other workshop participants asked if I'd ever had such a reaction to the notion of the burning—or lukewarm—platform. We talked about several different factors that might act as a burning platform for New Zealand schools: the failure of schools to address the persistent under-achievement of priority learners despite tens of millions of dollars spent; New Zealand's woeful well-being and mental health statistics; or our youth suicide rates being the highest in the OECD. In conversation we concluded that there were many different burning platforms in education, but the participant made the wry observation that perhaps the fact that an experienced school principal couldn't see the burning platforms in front of him was in fact the greatest burning platform.

When I work with groups, to explore generating energy for change I often lay out some examples of hypothetical crises that might act as burning platforms for schools: declining achievement or attendance; falling enrolment numbers; being in financial trouble; parent dissatisfaction; or even dissolving the board of trustees and moving into statutory management. I was asked to do some work with a school that had experienced some challenging times in previous years. In preparing for the work, I realised that over a two-year period they experienced every single one of the 'hypothetical' burning platforms outlined above *concurrently*: the board was replaced with a commissioner, they were in financial trouble and the local newspaper was running negative articles about the school on a regular basis. So when I worked with a lead team implementing a curriculum change they were unanimously clear that the level of urgency around change was significant and widely felt: no one believed the school could continue the way it had in the past. Not wanting to be unduly harsh, I suggested that while the school had been through tough times, its recent history might not be described as a 'crisis'. The leaders around the table looked at each other then one of them said "Oh no, it certainly *was* a crisis. That's not overstating it at all."

Even with this strong sense of urgency around change, we worked hard to sequence the various initiatives we had planned in order to roll them out at a sustainable pace. We knew that if the change wasn't incremental, staff might feel swamped. Our first act was to begin work on a prototype ILE in a set of disused classrooms. Lessons from this prototype were brought into a wider masterplanning and rebuilding process while others on the staff began to explore curriculum change in the junior school before potentially implementing it with seniors. The overall success of the project came from balancing the sense of urgency with a need to undertake initiatives in an incremental rather than panicked, step-change fashion.

One of the key benefits of establishing a sense of urgency for change is the way it can generate energy (force or momentum) for change amongst participants (Nelson & Jansen, 2009, p. 141). Müller and Liebhart argued that a change-based energy is particularly useful in times of cultural or more radical change; situations "where new patterns of behavior need to be established" (Müller & Liebhart, 2013, p. 1). Transitioning to innovative learning environments certainly fits that criterion: it is necessary to develop new cultures and new patterns of behaviour in order to be successful.

4.3.3.2 Generate cognitive dissonance

One of the key ways to generate energy for change is to make use of cognitive dissonance; specifically the well-studied desire that most people have to resolve dissonance when it occurs. As noted in Chapter 3, when employees are affectively committed to an organisation and identify with its values and goals, they are more likely to engage in both in-role and discretionary behaviours that are advantageous to that organisation (Meyer & Allen, 1997, p. 28). While a desire to engage in discretionary behaviours might emerge naturally, leaders can encourage its emergence by doing two things: generating a sense of cognitive dissonance, and supporting employees to resolve that dissonance in productive ways.

Cognitive dissonance is an aversive psychological state that people feel when there is a discrepancy between their actions and their attitudes. Dissonance theory holds that the "individual finds it difficult to maintain two conflicting stances or ideas simultaneously and consequently seeks cognitive consistency" (Samuelson & Zeckhauser, 1988). Festinger argues that:

> The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance. (Festinger, 1957, p. 3)

When cognitive dissonance is present, it can form a powerful source of energy for change as people seek to return to consonance (Ball, 1988, cited in Alton-Lee &

Timperley, 2008). In my work with schools, I see two main forms of cognitive dissonance: *internal* and *external*.

Internal cognitive dissonance begins with asking whether the internal values of the school and individual are being enacted. For example, if a school says that it values student voice, but the process of giving feedback on the plans for a new building doesn't involve students, internal dissonance should be generated. Once this fact is observed and acknowledged, teachers and leaders will feel an increased motivation to 'put things right' even if it means more work to seek feedback on the designs.

Atkin's golden circle model is a useful tool here again, because having clearly defined the values for which individuals and the organisation stand, dissonance can be generated by reflecting on how well people are enacting those values in a systematic fashion. Atkin's question, "How well are we achieving what we value and believe; how well does our current situation match our vision of what is possible?" (Atkin, 1996, p. 1) often gives rise to conversations that generate dissonance (for example, "*Student voice is one of our values, but I can't see much of it in this process.*")

A major motivator for Pukeiti School as they embarked on their innovative learning environment development was that staff felt their ability to enact their stated values was limited. Principal Dmitri put it bluntly to me: "[the buildings as they were] compromised what we wanted to do." Principal Vikram also felt some of his teachers "got to the point where [they said]: 'I'm a bit hamstrung now. I need you to give me a space where I can actually do it.'"

Dmitri felt a key role he played in the 'preparing for change' stage was to make staff feel "a little uncomfortable with the status quo." Once the initial prototype was developed and staff had the ability to look at it and observe it in action, there was a crystallisation of a feeling of dissatisfaction with the current buildings; initially from the team involved in the prototype, then the wider staff who became "increasingly uncomfortable with the single cell classrooms."

Cognitive dissonance can also be generated by forces outside the organisation. These external factors can also interact with values and beliefs to create dissonance. Often I begin work with schools by exploring what I refer to as 'the drivers of change' which are a set of trends that mean many of the traditional approaches to schooling are falling short of what students need to navigate the modern world. A set of three observations I use to structure these sessions are outlined below.

- It is no longer possible to predict exactly what knowledge people will need to know in the future: it is changing all the time, and new knowledge is being created at ever-increasing speeds (Bolstad et al., 2012).
- Information is freely available like air or water. Knowledge can now be gained everywhere. Increasingly education is about skills, disciplines, and competencies as well as knowledge (Wagner, 2014, p.111).
- Increasingly what the world cares about is not what you know but what you can do with what you know. Simply getting the right answer is no longer enough (Wagner, 2014. p.111).

The purpose of these provocations is to ask people to question whether their current vision and values framework is fit-for-purpose in preparing students for an unpredictable future. Principal Vikram once told me that his prime "instigator of change [was], 'What are we preparing our children for as they leave primary school?'" Vikram noted that a significant breakthrough for one of his staff who was resistant to innovative learning environments occurred when we held a meeting exploring the modern workplace:

> For one of my rocks a changing point for them was the slide you showed… working at Apple or working at Google where they were lying on a couch, standing at a stand-up table, working on an iPhone, working on a computer. And she went, "That's going to be the workplace. Not at every workplace but that is what kids are going to go to. Not what I do. Not what my father did as a printmaker or something." She said that changed her.

What had occurred for that staff member was that new, external information became available, and the interaction between this new information and the values she held generated dissonance and therefore energy for change. That energy was directed into changed practice: "I need to loosen up," she said, "I need to let the students choose. Not say, 'You must do this, this, this, this and this.' I need to let kids get passionate about their learning." This observation gave rise to an evaluation of whether the school's current facilities supported that approach to learning, or whether the facilities needed to change.

Generating dissonance, however, is not enough to gain momentum with change. Festinger cautioned that when dissonance is present, people may try to reduce it in unproductive ways, suggesting people "will actively avoid situations and information which would likely increase the dissonance" (Festinger, 1957, p. 3)—essentially 'burying their heads in the sand'.

Most people tend to reduce dissonance by doing one of three things.

- Change one of more of their attitudes: "We're going to have to do it sooner or later so we might as well give it a go."
- Acquire new information: "If we were to do this co-teaching thing, how could we use it?"
- Reduce the importance of the cognitions: "If we can't teach like that, I'm sure the kids will be fine anyway" (Festinger, 1957)

An example of a staff member reducing the importance of a cognition would be that when they are presented with images of the Apple or Google workplace their internal narrative says "Yes, but my students probably won't end up working there [so I don't really need to change]". This avoidance behaviour can be countered by not relying on limited sets of research or findings ("It's not just Apple or Google that are changing; look at the Real Estate business down the road using VR, or the mechanisation of farms, or the high-tech GPS tools drainlayers use these days").

As well as decreasing a person's ability to convince themselves the dissonance they are experiencing isn't real, principals should also close down the options people have to avoid the change (and therefore the dissonance). Leaders should undertake observations of (and give feedback about) new teaching practice in action; they should discuss readings and implications of new research with teacher and teams, asking what concrete steps they will take; incorporate new practices into appraisal and professional learning so that staff members cannot avoid engaging with the new practices, therefore ensuring dissonance is resolved in productive, action-oriented ways.

4.3.4 Minimise status quo bias

Few people do what they do because they think it *doesn't* work: most people do what they do because they think it *does* work. If existing practices didn't work, people would have replaced them with better approaches long ago. Thus, the status quo, by its very existence, holds considerable sway with people, and often acts as a barrier to change. Godin hinted at the way we rationalise our own decisions in order to remain in the status quo:

> Most of us say, “this is better, therefore I like it.” In fact, the converse is what actually happens. “I like it, therefore I’m assuring you (and me) that this is better.” (Godin, 2018, para. 1).

What Godin is suggesting is that many people tend to like things that are familiar to them and therefore overstate the benefits of those familiar items, rather than objectively evaluating the merits of two different objects or approaches: the tried and true will often win out over the novel and unfamiliar. Several well-known cognitive biases support Godin’s view, including self-serving, zero-risk and confirmation biases (Johnson, 2018; Schneider, Streicher, Lermer, Sachs, & Frey, 2017b; Shrira, 2018).

If status quo bias can keep people anchored to the way they currently do things, it can therefore inhibit the adoption of new strategies. But if leaders understand how this bias works, they can begin to mitigate its effects. Ways of doing this include helping people see new practices as an extension of what they are currently doing, not a radical departure from it. If teachers can see the development of innovative learning environments as being the next step in a long journey towards student-centred learning, or more collaborative teaching, principals can make the change seem an act of continuity rather than a departure from established practice.

I often tell people that when they walk into a new learning environment for the first time, they’re more likely to spot the differences rather than the similarities. People’s eyes might be drawn to the bright furniture, new technology, different room layouts, or walls and doors. What they don’t tend to focus on are the elements that are the same: the tried and true modes of teaching, good access to resources, opportunities to use effective pedagogies, form groups, allow students to work quietly on their own, etc. Pointing out to people what has *not* changed is often necessary to minimise the ‘shock of the new’.

Samuelson and Zeckhauser (1988) describe three factors which influence status quo bias (rational decision making, cognitive misperceptions, and pyschological commitment), which I label collectively as ‘pull factors’ or forces that keep people attached to their current practices.

Pull factors:

Rational decision making, or an assessment of the relative costs and benefits of change. When evaluating whether a change is worth supporting, participants might consider transition costs (both transient and permanent) and uncertainty costs (the psychological uncertainty or perception of risk associated with the new alternative). If participants conclude that the costs outweigh the benefits of a change, status quo bias will be stronger. Imagine going to the doctor with a sore toe:

> **Doctor**: I can make that pain in your toe go away, but I'll need to amputate your foot.
> **Patient** [Rationally evaluating the situation]: Thanks very much, but I think I'll stick with my sore toe to be honest.

Principal Dmitri knew that high levels of uncertainty around change would impact on the rational decision-making of his community. In order to ensure they were as well informed as possible to make the decision, he closed the school for a day and offered parents, students and teachers the opportunity to undertake a road trip to two schools who had recently embarked on similar building programmes:

> We shut the school for one day and went on a bus tour with parents and students... Because at that stage we were doing a lot of talking with kids but now we could visualize it... We got about 24 parents eventually [and] went with cars. We went to two schools which was brilliant: they had the same vision statements more or less.

Two important outcomes from the road trip were, firstly, that the parents who attended decreased their uncertainty about the proposed change, making them better rational decision-makers, but also, as Principal Dmitri observed, "parents talk." The parents who were able to attend talked to those who weren't able to, once they returned home. The first school, Maungateitei, was "absolutely living what they were talking." At the second, Te Rawhiti School, they received an impressive presentation from a senior leader on the vision and intent of the development, as they were then led through the learning spaces:

> We went into the classroom and every door was shut. [The leader] was hugely disappointed. He was walking ahead of us opening up doors. And midway through he said "Well you know you can only but try."

An outcome from the road trip that Dmitri hadn't anticipated was that the community got to see two alternative futures for the school: one where the change was successful and where new ways of teaching became possible, and one where a lot of money and effort was expended for not a lot of gain: "you can only but try." Two weeks after the road trip Principal Dmitri surveyed the parents about what they had observed and they were “overwhelmed with what they saw at Maungateitei School.” Dmitri designed the survey to encourage reflection on, and sense-making of, the experience but it also gave the leadership team valuable feedback about what the parents had interpreted as the potential of the new approach.

The second strategy Principal Dmitri engaged in to support rational decision-making was to have an architecture firm to draw up a set of concept plans for their school. In Principal Dmitri’s words, they were invited to design “the ideal school.” The intention was never to build what the architects designed (“it was a multimillion dollar change in our school—we were [never] going to build it”) but there was benefit in having the plans drawn up nevertheless.

> The staff suddenly realised: “Hang on, there’s a lot we can do to in our school.” So the board put a lot of money into it. And they realised that six thousand dollars allowed the staff to visualise. They could see possibilities.

Rather than relying on the each staff member’s ability to imagine what was ahead of them, the board and principal offered a visual representation of a possible “desired future state” (Hill & Jones, 2012, p. 14) to facilitate conversation. The approach was successful with parents as well, and further demonstrated the benefit of bringing the group of parents on the road trip:

> We used those concept plans with parents as well. And that parent group that went off to Maungateitei School. They so couldn’t wait for them to come back. We kept [them] in the loop here and they were so keen to get those plans back and see them.”

One of the reasons uncertainty was minimised was because Dmitri was also providing timely and useful information regarding the change. Doing so:

> Decreases anxiety levels and uncertainty that might occur due to “a lack of information regarding the process and intended outcomes.” (McKay et al., 2013,p. 30)

Dmitri also realised he had another great opportunity to minimise parental uncertainty around Mangahuia’s new learning environments. For some time, the school had been working to improve parent participation in student-led conferences, but attendance continued to languish around 40%. Knowing that parents were curious about the new learning environments, he decided to shift student conferences so they took place during the school day. It might seem counter-intuitive to some: busy parents who had commitments during the day would theoretically be less likely to attend a student conference at 11am or 1pm. However, attendance at conferences jumped to almost 100%. Not only could parents see the learning environments in action (further removing any uncertainty about how they operated), they could also stay after their conference and ask teachers questions about learning:

> So the parents are actually in a classrooms seeing the learning while they are having these conferences. It's been going for a while, and has been very successful.

A second factor influencing status quo bias is what Festinger refers to as "cognitive misperceptions," or the sometimes illogical psychology of decision-making. Two key misperceptions in decision-making identified by Samuelson and Zeckhauser are *loss aversion* and *anchoring* (Samuelson & Zeckhauser, 1988, p. 35). Loss aversion is the psychological principle that losses loom larger than gains in human value perception (Kahneman & Tversky, 1984, p. 342), meaning the potential for loss can be a powerful motivator for people. Human beings have been described as "irrational loss avoiders" (Timperley & Alton-Lee, 2008, p. 107): sometimes we act against our own self-interest just to avoid the potential of loss (Aiken & Keller, 2009, p. 11). As Kahneman and Tversky articulate it, individual preference is often influenced in ways that are "concave over gains and convex over losses" (Kahneman & Tversky, 1984, p. 342).

Another reason status quo bias can be a strong influence over behaviour is that change often asks people to move away from practices they have refined and honed over years, attaining a level of fluency referred to as *unconscious competence* (Burch, 1970). New practices disrupt this sense of ease and automaticity, and hold the potential for people to become consciously incompetent. For many, this move from competence to incompetence will represent a loss which, in turn, will generate feelings of apprehension. These, if not counterbalanced with potential gains, will result in increased resistance to change and a reaffirmed commitment to the status quo on the part of change participants.

Kahnemann and Tversky illustrated the power that the potential of loss can wield with a study that had participants bet on the toss of a fair coin. They stood to win $10 for a correct call and stood to lose $10 for an incorrect call, which means that over time people are likely to break even. Most participants in the study refused to participate at these odds, mostly because the possibility existed that they might have ended the experiment having lost some of their own money. As Kahnemann and Tversky note:

"most respondents in a sample of undergraduates refused to stake $10 on the toss of a coin if they stood to win less than $30" (Kahneman & Tversky, 1984, p. 342). Gains need to be considerably greater than the status quo (or potential losses) for people to be comfortable risking what they currently have.

Another key cognitive misperception active in status quo bias is anchoring which is the name given to the asymmetrical position the status quo holds in decision making by virtue of the participant's knowledge of, and familiarity with it (Samuelson & Zeckhauser, 1988, p. 36).

> **Workshop transcript**: "A number of things keep us anchored to the status quo. We do what we currently do, not because we think it doesn't work, but because we think it does work. We wouldn't do it if we didn't think it worked. It's not perfect, but at least we know what the probable outcomes are going to be. It's like 'the devil you know'. If you're being asked to give up your current practice and embark some kind of new practice there's a certain level of uncertainty attached to it. There's also the sunk costs associated with it. In some cases we've spent years if not decades honing this practice and getting it as efficient as it can be. Doing things in new ways is going to mean a loss of effectiveness or efficiency as we find the new ways to do things. That loss will loom large for people. There isn't much you can do to undo sunk costs—that's all occurred in the past, but what we can do is engage in really good self-review to ask questions about whether that practice we've sunk so much time into refining is actually achieving the results we believe it is. Similarly if you're asking me to go from down here all the way up to here [gestures low and high with hands] I'm probably going to struggle with that. But if the jump is a small one: from here to here [one hand just above the other] I'm more likely to make that first step, find success in it and use that success to take another small step."

Principal Vikram experienced status quo bias with a number of staff who visited other schools and had seen practice that was inspiring: "my deputy principal and the other two leaders—their eyes lit up. It was just quite... heartening as an educator." The gains from the new approaches were clear: increased variety of potential teaching and learning activities, engaged students, happy teachers. But against these potential gains, people continued to weigh up what they might lose: "It's a fear of what you are losing more than a fear of where you are going to." One teacher at Pukeiti struggled to see past the potential losses incurred by moving from one teacher/one class approach to one where students were taught by multiple teachers: "I know my kids and my room. I know I'm doing a good job. Why are you taking my [students] away from me?" The change represented a loss for this teacher, and given this framing, it was understandable that she tried to resist it.

The third factor that affects status quo bias is what Festinger refers to as "psychological commitment," or the psychology of decision-making, which again is not always rational in human beings. Psychological principles which may affect an individual's commitment to change include: sunk costs, regret avoidance, a drive for consistency, cognitive dissonance, and efforts to feel in control (Samuelson & Zeckhauser, 1988, p. 40). Sunk costs refer to previous commitments, which can generate reluctance to switch to a new alternative and may not be uniform across all members of a team or social system: some teachers make have invested more time and effort into practices that are going to become obsolete than others have.

Efforts to feel in control are not unreasonable, and often stem from an individual's desire to direct or determine their own situation (Samuelson & Zeckhauser, 1988, p. 40). These desires can be accommodated by ensuring a participatory approach to planning and implementing the substantive features of the change process and involving stakeholders in decision-making, as outlined in Chapter 3.

Push factors

Factors that push people towards change are often about the proposed and realised benefits of the change, which have already been explored under 'Readiness for Change'. To illustrate how important it is to have a clear understanding of the benefits of a change, I begin most of the sessions with new client schools by asking the question "Why are we doing this? What are the benefits?" People often list things like:

- Working from each other's strengths.
- The ability to develop a more diverse set of relationships with students.
- More professional knowledge available to us.
- It's fun.

Principal Klaus recounts a number of occasions when he had to help people move their focus from potential losses back towards potential gains, explaining to staff:

> No, you might not be able to continue to plan on your own [loss], but you can collaborate to divide and conquer with your planning [gain].

Klaus worked hard to ensure people saw the status quo was not perfect, continually redirecting people to see the potential gains of the new approach:

> When you're on your own, you've got no one to go to, whereas you've got

> people to go to now who can support you and help see you through it. So let's use the thing that's causing us to feel like this and turn it into the same environment that will help you get through these periods of confusion frustration, exhaustion.

Another potential gain that was used to draw attention away from potential losses was the support that the team could provide each other when situations like illness or the need to cover for each other occurred:

> Yup. It's difficult. But how good is it knowing that if we can't be here, or someone's sick, that those children aren't having a wasted day... Those children have not been compromised.

Principal Klaus had an interesting challenge on his hands when he realised that parents (not staff) were experiencing loss as a result of the change and had therefore begun anchoring back to the status quo. A group of Year 8 parents felt that some of the traditional privileges (and kudos) afforded to the most senior students at Ōpapa School appeared to be disappearing because they were amalgamated with Year 7 students in an innovative learning environment. The Year 8 students felt they were no longer clearly 'top dogs' and therefore the leaders of the school, so Principal Klaus had to respond to address some of the perceived losses:

> We also had our children, and in particular our Year 8 body who... traditionally in our school we had a Year 8 classroom and the kids always moved towards that. And they were really excited about that Year 8 class. And they felt that was being taken away from them and it was these spaces that weren't fair. So we had a set of parents go:
>
>> Hang on a minute, my child's really unhappy; we've decided to stay here, not go to intermediate school. We've been loyal and you taking this, and we're going to lose, and our kids aren't happy, so we're not happy.
>
> So then we had a really good parent who just said "Klaus really what I'm hearing all our parents say is that our kids aren't that happy because of this. So that's why we're here. Can you give us some assurance that we're going to get some leadership opportunities and the same initiatives and the same responsibilities that the Year 8s of previous years have?" And he just simplified it... and all the parents went, "Yes. That's what we want."

A challenge I've often faced when trying to get teachers to engage with the proposed benefits of ILEs (and therefore decrease the pull of the status quo) is that they are time-poor, and engaging with research can be time-consuming. Often teachers are honest and admit engaging with research is not something that comes naturally for them, preferring someone else to sift through the literature and make recommendations to them. To respond to this repeated challenge, I developed a card game to help people engage with research and find examples of research principles achieved either well or poorly.

The game consists of 20 'research cards' and 23 'picture cards' (20 to match, leaving three spare at the end of the game). I investigated game mechanics to decide on a suitable engine for the game and decided that an approach known as 'cooperative matching' would work best to ensure the focus wasn't on winners and losers, but on teachers helping each other deepen their understandings of the key research principles behind innovative learning environments. Examples of research cards are 'Heat, light, ventilation and acoustics should be optimal'; 'Student learning should be displayed on the walls'; and 'Furniture that allows students to stand or move about should be provided.' People match each research card to an image of a facility demonstrating that principle in action.

I have found that using a game to explore these benefits is useful for three reasons:

- It's fun and decreases the earnestness and formality often associated with research;
- It provides an easy-to-remember summary of an important research finding; and
- It removes uncertainty around some of these principles by providing pictures of schools similar to the teachers' context, enacting these research principles.

Principal Dmitri also used creative resourcing to help minimise uncertainty and therefore decrease the strength of status quo bias with his community. In New Zealand, all teachers are given a certain percentage of their week as classroom release time (CRT), and this is often used for planning, undertaking assessments or marking. Principal Dmitri 'banked' a small portion of this time and used it in two ways to minimise uncertainty for his teachers.

Firstly, visits to other teachers' classrooms within the school were encouraged. These visits were called *noticings* because they were followed up by conversations between the two teachers about what the visitor had noticed. Dmitri said "[We had] a lot of cross group noticings happened in that first term. Juniors up into the seniors; seniors down [to juniors]."

In addition, extra resourcing was used to facilitate visits to other schools, with the board of trustees paying for any extra costs like accommodation for visits further afield. Dmitri notes that this programme "led to a lot of the resistors seeing these kinds of schools."

When recalling the different approaches he used to decrease uncertainty for staff, Klaus listed a number of deliberate initiatives:

> [I] went to Melbourne on a [Principal's Association] trip and got some ideas. Everybody went to the uLearn conference every second year and the focus was around ILEs and collaboration. We all travelled to Christchurch and as a staff we looked at different schools and how they interacted and operated in those spaces and the list of challenges they had so we could relate. So at not one time did we feel like this is just unique to us.

As well as decreasing the pull of the status quo, Klaus's process achieved two significant outcomes. Firstly he clearly signalled to people that things were changing, but he also helped people to identifying which practices in the status quo needed to be discarded, and which were going to prove useful in the new environments.

4.3.5 Develop a small, safe prototype

Video transcript:

A leader needs the guts to stand out and be ridiculed. What he's doing is so easy to follow. Here's his first follower with a crucial role; he's going to show everyone else how to follow.

Now, notice that the leader embraces him as an equal. Now it's not about the leader anymore; it's about them, plural. Now, there he is calling to his friends. Now, if you notice that the first follower is actually an underestimated form of leadership in itself. It takes guts to stand out like that. The first follower is what transforms a lone nut into a leader.

And here comes a second follower. Now it's not a lone nut, it's not two nuts -- three is a crowd, and a crowd is news. So a movement must be public. It's important to show not just the leader, but the followers, because you find that new followers emulate the followers, not the leader (Sivers, 2010).

Derek Siver's popular TED Talk on how to 'start a movement' is often referenced in schools. Despite its brevity (it's only three minutes long) it provides some useful insights into one of the common challenges associated with change: how to take one *lone nut's* idea and turn it into a practice that is widely adopted. During a report back session with a group of teachers who were leading innovations in their school, one teacher offered an observation to the others in the room: "It's not easy being a 'lone nut.' We were outcasts at the start of the year. People didn't know what we were doing."

Developing a small, safe prototype is one of the best ways to overcome this lack of knowledge and to spread new ideas. Prototypes help to move promising approaches from the ‘lone nuts’ to the rest of the organisation.

4.3.5.1 Types of prototypes

When implementing innovative learning environments, schools typically prototype new ideas using three different approaches.

- System prototypes: exploring the *non-physical* elements of teaching and learning that might prove useful in ILEs. These approaches might include new timetables or organisational structures, software or tools for collaborative planning, shared problem-solving or co-teaching within traditional spaces.
- Ephemeral prototypes: building a temporary representation of the new building using materials such as cardboard or masking tape on a gymnasium floor; or building representations on tables in a staff room. These full-size or scale-model representations help people to ‘step inside’ a new space and begin to visualise the dimensions, proportions and ways the space might be used for teaching and learning. A similar approach is to use 3D printed furniture or paper representations of furniture as scale models. Impractical room layouts can be identified quickly and corrected early, and a wide variety of furniture configurations can be tested without having to invest in, or move, heavy furniture.
- Enduring prototypes: making use of a suitable existing space (such as a library or staff room) or making minimal, cost-effective alterations to classrooms in order to allow teachers to test some of the approaches believed to be useful in an ILE. Schools prototyping in this way often buy some of the agile, multi-purpose furniture commonly found in ILEs to test its durability and usefulness ahead of large-scale purchase.

All of these approaches to prototyping have their own challenges, for instance libraries (while they do offer a sense of openness) often don’t provide the purposeful learning settings that one would expect from a well-designed learning environment; in part because they aren’t designed for teaching and learning. A team with whom I worked to establish a library-based prototype tried valiantly to make co-teaching work but ultimately had to admit defeat because the shortcomings of the physical space (which lacked sliding glass doors and free wall space due to fixed library shelving) meant the amount of effort required to be successful was greater than the amount of effort required to offer engaging, differentiated learning back in their own individual classrooms. They chose to retreat back to their classrooms and focus on curriculum-based system prototypes.

4.3.5.2 Benefits of prototypes

Prototypes can produce a range of benefits that make eventual, wide-spread adoption easier.

- They can offer people the ability to grow capability in key areas ahead of a significant cut-over date. Pukeiti's prototyping of peer-peeps (observations of others' teaching) helped decrease the anxiety some teachers felt when being observed by others. Reducing this stress meant one fewer challenge awaiting people when they eventually moved into their innovative environments.
- By facilitating conversation between colleagues, prototypes often develop the shared problem-solving capability that becomes useful when inhabiting innovative learning environments:

  > But if we put the bags there, they're right next to the reading corner. The students trying to read are going to get distracted by kids getting stuff out of their bags. Wouldn't it be better to put them over here by the door?

- Prototypes allow people to gradually adjust their mental models and get used to changes months (if not years) ahead of a point when they themselves will be required to adopt new practices.
- Smaller prototypes allow participants to control a limited set of variables, therefore increasing the likelihood the prototype will be successful. People might begin to co-teach in one small learning area of the curriculum ("Just reading", or "Just during maths") or in one block of the timetable ("Before morning tea") than across the whole curriculum all at once, aligning with the principle that effective change should be incremental.
- Prototypes also offer the opportunity for teachers and leaders to gather data about what is—and isn't—working ahead of time. This provides opportunities to celebrate the benefits of the change as well as opportunities to engage in considered, systematic problem-solving on a smaller scale than is possible when the whole school is involved.
- Transition costs are decreased when the staff involved in the prototype engage in

> sense-making, or capturing and sharing with others what's working. These insights, tools and structures decrease the magnitude of change for others who follow behind and provide concrete, tangible artefacts to support the transitions of others.

As Young and Tuckwell observe, a person's capability to use an environment well is linked to how well that person can *see* and *make use of* the opportunities afforded by that environment. Prototypes provide educators with enhanced opportunities for *actualisation;* or perceiving *and using* the affordances available in the environment (Young & Tuckwell, 2020).

4.3.5.3 Features of effective prototypes

Prototypes that deliver the kinds of benefits outlined above generally have three essential features: they have the right people; the right purpose; and they follow the right process.

When it comes to personnel, the right people to undertake a prototype are those who are respected but fallible practitioners: staff with credibility and a sense of connectedness with the rest of the staff. By selecting staff members to whom others can relate, leaders can avoid the perception that the only reason a prototype has been successful is because super-human teachers have been involved. Rogers' model of the diffusion of innovation stresses that cutting-edge innovators are probably not the best people to undertake a prototype. Rogers argues that the innovator's relentless commitment to new ideas means they "may not be respected by the other members of a social system" (Rogers, 1995, p. 248). He also argues that those in the 'early adopter' or 'early majority' category are more likely to hold greater sway because of their status as 'localites' and because they are often known as "the individual to check with" about whether an innovation should be adopted (Rogers, 1995, p. 249).

Staff involved in prototypes should also be resilient problem-solvers. The prototype will probably generate a wide range of unanticipated challenges for practitioners, many of which lie outside their own expertise and the expertise of colleagues. Given that second-order challenges are, by definition, not solved by outside experts but by the stakeholders themselves (Waters et al., 2003), if members of a prototype team do not possess high levels of problem-solving capability and resilience, these challenges will remain unresolved, leading to increased feelings of frustration and resistance.

Principal Vikram spoke at length of the importance of choosing the right people to undertake a prototype:

> People look to [these people] as leaders naturally because they trust them and they know through longevity in watching them teach and doing that sort of thing that actually they're more than capable. And if they're prepared to have a look at this it must have some positives.

Secondly, a prototype needs to have the right purpose. It should be designed to gain insights into elements of practice that will eventually become useful to the wider staff, thereby decreasing the transition costs for those who follow behind. It should also be focused on elements that can be prototyped easily and cost effectively. In some cases, making changes to the physical learning environments might be possible but, because of the large costs often associated with building works, most schools find it difficult to prototype 'hard' systems like buildings and furniture. 'Softer' systems like pedagogy, curriculum, collaboration, and technology systems are more fluid and therefore able to be more readily adjusted when prototyping.

Another key purpose for a prototype should be to decrease the level of uncertainty surrounding an innovation by helping people gain a deeper understanding of what that innovation entails. Insights generated and challenges confronted should therefore be public and open. The less visible a prototype is from general view, the less people have the opportunity to become acclimatised to the principles and practices associated with it.

The third feature of an effective prototype is that it should follow a sound process. Short-term extra resourcing should be provided to recognise the increased workload of those attempting to deviate from established practice, but that resourcing shouldn't be a permanent part of the plan. Allocating on-going extra resources (such as providing participants extra teaching assistants or extra, permanent planning time) suggests to others that the innovation is not possible using current levels of energy or funding, which, in turn, may impact on peoples' beliefs about whether the prototype will be successful once it moves to a wider implementation.

It's also important that the prototype process upholds a sense of transparency and openness: people should feel comfortable walking in and seeing what is happening, and free to contribute their ideas to the solving of challenges the team is facing. The greater the level of transparency and openness of the prototype, the greater the likelihood people will feel collective ownership of the innovation.

The common adage has it that if you fail to plan, you're planning to fail. One school that didn't plan and implement an effective prototype using these three guiding principles eventually had a very problematic ILE implementation. Towards the end of a school year, I received a polite email from a teacher requesting some support:

> "Our school is in the midst of building the new ILE building and we are a little lost. Another teacher and I will move over to the new learning space next year, and we believe we need some professional guidance. Would it be possible to meet up to discuss the PD you offer, and when we should start having it?"

I'd met this teacher before and knew he was a relatively inexperienced second-year teacher, and to be honest, I was surprised that he was contacting me directly to arrange professional learning in his school; most requests of this type come from a senior leader. My initial thoughts were around whether the principal or leadership team even knew about the request because I didn't want to undertake any professional learning in their school without their consent. I replied to the email, asking if the principal was aware of the request and received the following reply:

> "I emailed the principal regarding this matter, but they are quite busy at the moment due to taking sabbatical leave in Term 2—I still haven't received a reply."

I was concerned at this stage that these two teachers didn't appear to be receiving the support they would need to develop an effective prototype, a feeling which deepened when I received an email from the principal:

> "I did encourage my Curriculum Director to contact you right at the beginning but—well you know how these things are. He is such a hard working busy guy he won't have remembered. Then I was most distracted with the preparation for my sabbatical—well you know how it is. It will be great for Kumar and Jack to connect with you. The plan is that they will move into the building next year and have the run of the place and then spread the learning style as they

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invite another teacher to join them in 2019 and then 2020.

Next year we should get you in to the whole staff but for
this year I think we will concentrate on the brave two.
They will need help with furniture design as well as
collaborative teaching."
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The results of this prototype, unfortunately, were quite predictable. Twelve months later I heard things hadn't gone very well, with both teachers retreating into separate corners, closing the sliding doors and essentially teaching separately.

In what ways did this experience fail to meet the test of an effective, small, safe prototype?

- Right people? In addition to an inexperienced (but enthusiastic) second-year teacher, the senior co-teaching partner was one who admitted he would find it difficult to try new things or teach in different ways because of having taught in a relatively traditional way for the 30 years of his career. He was keen to try new approaches but mentioned in every conversation we had that he would find it difficult to change his practice.
- Right purpose? The prototype took place in a completed new building; there was no opportunity to trial approaches ahead of time, nor was there a mechanism for the co-teaching team to share what they were learning to the wider staff.
- Right process? There was no opportunity for these two teachers to be part of a wider professional learning group exploring the challenges that were emerging or to work together on potential solutions. The building development was physically separate from the rest of the school on the corner of the site, and unfortunately this proved to be a metaphor for the disconnection the prototype team experienced with senior leadership and the wider teaching staff. The prototype was also very high-stakes: these two teachers were responsible for the learning of two classes of students and couldn't afford to embark on small, incremental experiments. On day one of the first term they were completely immersed in something they had no experience in, and they felt well out of their depth.

Eventually the senior team member felt he couldn't continue with the project and requested he be returned to a single classroom the following year. Another teacher was found to replace him, and while later in the school year I was able to spend some time with the new co-teaching pair I felt this was again unfortunately too little and too late.

In contrast, Pukeiti School was able to undertake a prototype that aligned with the features of successful prototypes. The school was lucky enough to have two classrooms which (even though they were run-down) had sliding doors that could be opened. Even though they had remained closed for many years, two teachers opened them and began to teach in a way that (as Principal Vikram described it) "they believed was cooperative but until we got into the depth with you we were nowhere near that." Having these early adopters was crucial, but Principal Vikram could see that he needed his management team "who are my best teachers" to join these early adopters in order for the project to have clout.

Without this, Principal Vikram believed, the project wouldn't have been as successful as it was. From there, the school began to explore different models of learning and co-teaching they believed would work, using the rest of the staff as a sounding board in an open, public prototype. The teachers in the initial prototype got on well together, which also appeared to be crucial for the project.

As hoped, the prototype generated further appetite for change with some of the other staff approaching the principal to say "I'm a bit hamstrung now. I need you to give me a space where I can actually do it." The benefits of the trial had become clear to the participants, but also to observers, offering what is Pascale and Sternin refer to as "social proof" or evidence from one's own community that something is working (Pascale & Sternin, 2005, p. 7). They argue that those pioneering new practices (known as "positive deviants") lead change that is "bottom-up, inside out, asset based" arising from organic, naturally-occurring 'deviance' from the status quo (2005, p. 4). This research also suggests "social distance" is a factor that influences the adoption of new ideas, noting resistance can arise from ideas "imported or imposed by outsiders," while the kind of social proof that a local prototype can offer people ultimately aids its widespread adoption. Prototyping new practices within a school provides precisely this kind of social proof.

One school I worked with was experiencing difficulties in a range of areas: a rift between senior leadership and the rest of the staff; a falling roll; damage to buildings from a natural event that necessitated the rebuilding of much of the school. As we began to look at preparing teaching staff for the implementation of ILEs as part of the rebuild, I struggled to see how we could remove some of the barriers to change for staff. The largest issue, as I saw it, was that staff would see the change as being imposed on them from outside.

Yet even in this school there was one teacher whom I would have regarded as a positive deviant: they were getting great results and feedback from students, teaching in very interesting and effective ways and lifting student achievement well above the rest of the school. What I remember most about this teacher was the distance they maintained from the rest of the staff, including eating lunch in a far-off area of the school rather than in the staff room. My advice to the leadership team was to try to bring this teacher in and to learn from them what they were doing. If some of the effective ideas they were prototyping could be brought to others, the social distance might be lessened and a wider audience for this positive deviant might be found.

In a different context, I saw what can happen without effective prototyping. Working with a large secondary school moving into new ILE-style classrooms, I became increasingly aware of the lack of progress we were making with the professional learning. I ran a series of large-group sessions with staff, helping them understand the reasons for the change in buildings, the importance of team culture and the common challenges faced when co-teaching; but even as we ran through these sessions I could feel the staff becoming more and more disengaged. My professional relationship with the school eventually tapered off and finally came to an end. I undertook a great deal of reflection about the project: I felt like I had let the school down and hadn't prepared them for what was going to be a significant transition.

Whatever my own shortcomings as a facilitator, I also knew that an inability to prototype and trial new ways of working also hampered the learning that was taking place. The new building was well overdue and as a result the existing learning environments were run-down to the point where it wasn't prudent to spend money to make the changes required to allow teachers to prototype new ways of teaching, gaining valuable confidence in those new approaches. One team had managed to cut a hole in a wall between two classrooms and had begun to experiment with co-teaching and learning zones, and I couldn't help but think the inability to test strategies ahead of 'cutting the ribbon' was a vital part of the process that was missing.

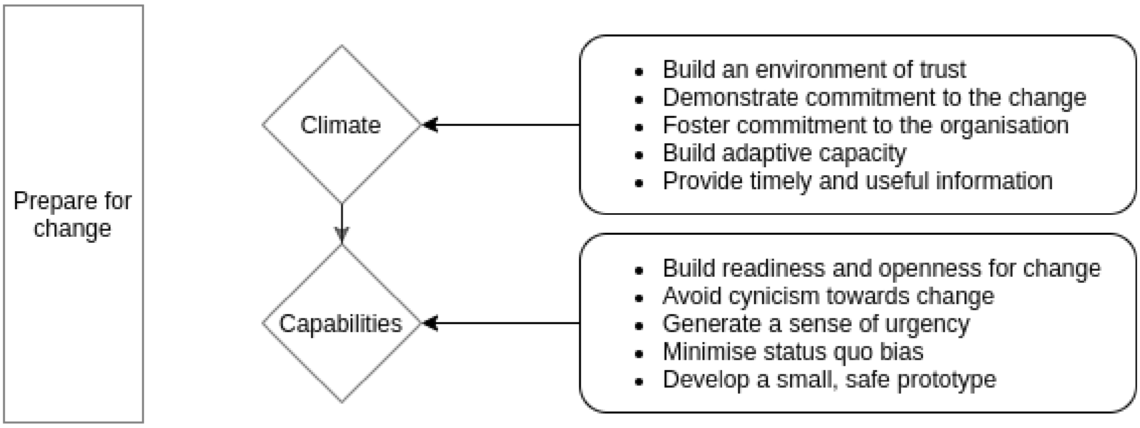

Figure 4.3: Conceptual framework (preparing for change)

Prototyping offers a crucial link between the preparing phase (Figure 4.3) and the implementing phase in a change. To use an architectural metaphor, it takes take the groundwork—the foundations—and starts to build something new. Without a solid foundation the building is likely to collapse, but the foundation is only a means to an end. Far more important than any foundation is what is built upon it. The ‘preparing for change’ components of the conceptual framework are about ensuring the appropriate climate and capabilities exist within an organisation to ensure the next stage is successful. At this point in the journey however, it’s time to move into the next stage. It’s time to move the balance from talking to doing; it’s time to implement change.

5 Chapter 5: Findings and Discussion (Implementing Change)

What is past is prologue.

—Shakespeare, *The Tempest*

Even with all of the planning and preparation that went into the opening of Ōkahukura College, I still found teaching my first lesson in an innovative learning environment challenging. Personally, I felt I was a good teacher: I'd always had good results with my students, I felt I built relationships with them well, was a good colleague and had been able to manage most of the behavioural challenges I'd come across. Alongside this confidence in my practice, as a newly formed co-teaching team my colleagues and I had carefully planned how our first lessons would go—we had devised a set of small-group activities to help us get to know our new students: ice breakers, name games, and goal-setting activities.

With this confidence in my practice and detailed planning behind me, I should have been raring to go. The truth was that I was self-conscious about almost everything that happened in that lesson. I found myself lowering my voice below my normal volume because I was suddenly aware that my colleagues were now able to hear every word I was saying. I was hyper-aware of the jokes and gags I was cracking with students lest colleagues think I was too familiar with the class, something I'd never worried about before. I felt like I was adjusting my manner because teaching was suddenly a public rather than private act; an act that was being experienced by group that was wider than just my students and me. I felt like I'd crossed a significant threshold, and frankly it was really uncomfortable. If I had been honest with myself, I would have said that if I'd been offered the opportunity to go back to the old ways of doing things, in that moment I probably would have taken it. When I look back on it now, I can see I was experiencing the two key forces that are often observable in the implementing phase of a change: *action* and *reaction*. The 'action' was me diving in and doing something different: teaching in collaborative learning environments. The 'reaction' was what I experienced next: feelings of insecurity, self-doubt and anxiety.

In managing the dynamics of the action/reaction equation, leaders have a difficult challenge ahead of them, most notably to ensure participants continue to engage with the change rather than fall back to the comfortable and familiar.

5.1 Action

> Until you walk it, you don't know what it's going to be. I just remember day one was absolute chaos. Staff thought they'd organised everything, but it was absolute chaos. "What the hell have we done?"

What Principal Dmitri is describing is the exciting but uncomfortable process of 'cutting the ribbon' and stepping into a new space (physically and metaphorically). This moment is an exciting mix of action and reaction: of planning finally turning into practice, and of anticipation giving way to disequilibrium as familiar patterns and routines disappear. It's showtime.

5.1.1 Overcome the knowing-doing gap

> Things won are done; joy's soul lies in the doing.
>
> —Shakespeare, *Troilus and Cressida*

If people are to cut the ribbon and make changes to their practice, they must overcome what is referred to as the *knowing–doing gap*; a variant of status quo bias that occurs when people know what they *should* do but persist with what they've always done. Pfeffer and Sutton have found that the knowing–doing gap occurs when:

- talk substitutes for action
- memory substitutes for thinking
- fear prevents acting on knowledge
- measurement obstructs good judgement
- internal competition turns friends into enemies (Pfeffer & Sutton, 2000, p. vii).

The Education Review Office has observed a knowing–doing gap in New Zealand education, noting in National Reports that knowledge of what makes a difference for learners is often widespread:

> Only 23 percent of schools' actions demonstrated the use of highly effective practices the students needed to catch up with their peers. (Education Review Office, 2013, p. 1)

If the knowing–doing gap exists in established fields such as pedagogy (in this case accelerating the progress of priority learners) it's not surprising it exists in more emergent fields such as innovative learning environments.

Principal Dmitri observed a knowing–doing gap occurring in one of the schools he was mentoring through the development of their innovative learning environments. They had visited Mangahuia...

> ...about four times. They came with the principal, then the leadership team came. Then the teachers came, and then the teachers came back and shadowed our staff. And [the deputy principal] and I, just said "For God's sake just go and do it." At the end of the day they got so scared of the whole process.

For that school, fear prevented them acting on their knowledge. Dmitri also remembers other schools choosing a future date as the moment they would begin, but as the dates got closer, other things inevitably got in the way: there was a change in school leadership; a new student management system arrived; changes occurred in technology. Principal Dmitri remembered hearing a school listing the things there were going to do in the future without mentioning what they were currently doing: "We're going to do this and this next year," they would say to him, but when he said pointedly: "What are you doing *now*?" they couldn't answer him. In the end? "They ended up doing nothing."

Pfeffer and Sutton proposed a set of guidelines for action that are based what they have found to be the recurring themes that lead to a knowing/doing gap. Four of these eight guidelines emphasise the importance of people making some kind (any kind) of modest beginning.

- Knowing comes from doing and teaching others how.
- Action counts more than elegant plans and concepts.
- There is no doing without mistakes. What is the organization's response?
- Measure what matters and what can help turn knowledge into action. (Pfeffer & Sutton, 2000, Chapter 8)

Principal Dmitri knew he had to overcome the knowing–doing gap if he was going to expand Mangahuia School's (accidental) prototype beyond those initially involved. Rather than asking teaching teams to replicate the prototype exactly, he asked them to make changes inside their existing classrooms that were *in the spirit of ILEs*. These changes included making subtle changes to classroom programmes, timetables, or even furniture layouts, in the knowledge that, because 'action counts more than elegant plans,' these kinds of changes would probably result in an increased capacity to take on further change:

> We had several teachers trialling in single cell classes around timetable. Trying to be far more flexible in how they used their learning spaces and trying to set up their own mini spaces in their classrooms in single cell.

As a result teachers gained confidence from making small steps into the unknown while the majority of their practice remained the same: “I can control my planning.” These modest changes offered small, safe ways for people to begin *doing and teaching others how*. As people began to make these shifts in practice, they began to answer some of the questions Isern and Pung listed as potential causes of ‘transformation paralysis’: “Where to start? What and how to prioritize? How to allocate tasks across the organization?” (Isern & Pung, 2007, p. 4).

In line with the principle that *knowing comes from doing and teaching others how* Dmitri celebrated people’s first steps and provided forums for teams to share with other the first steps they were making: “All our staff meetings were things fed back in from the prototype: how their workshops were running, how they could be far more flexible.”

The importance of simple first steps to overcome the knowing–doing gap is also supported by the change implementation framework known as *the change formula* (initially developed by Harris & Beckhard (1987) then popularised by Dannemiller & Jacobs (1992, p. 483)). The formula:

$$D \times V \times F > R$$

...argues that change occurs when D (dissatisfaction with the present situation), V (a vision of what is possible) and F (*first steps* towards reaching the vision) exceeds R (the total resistance to change).

> **Memory**: Learning Environments Australasia Conference: 31st May 2019. During the closing address for the conference, Master of Ceremonies Ewan Macintosh is urging the audience to turn what they have learnt over the previous four days into actionable next steps. In the audience, I’m thinking about the knowing–doing gap when Macintosh puts up a slide on the big screen. It’s a John Hunter quotation that perfectly captures what I’m thinking about. The quotation simply reads: “Don’t think too hard. Try the experiment.” (Macintosh, 2019)

5.1.2 Make the change appear manageable

When leading transformational change, Isern and Pung cautioned leaders not to implement change in such a way that it is unmanageable. Change projects that are too large in magnitude “can paralyze [organisations] embarking on a transformation” (Isern & Pung, 2007, p. 3). Large-scale changes, they argue, should be broken into smaller, specific initiatives, linked by clear themes. In short—they should simplify the process as much as possible:

> Leaders...should make it clear how these initiatives will be sequenced, how they will relate to one another, and how the objectives of the initiatives will collectively achieve the overall aspiration. This approach makes change seem not only manageable and realistic but also personal and exciting. Articulating exactly which functions, geographies, and product lines will be affected, moreover, reduces unnecessary anxiety in the organization.

One of the challenges of implementing innovative learning environments is that they appear to be a complete paradigm shift: buildings, furniture, teaching approaches and technology all seem to be so different that nothing appears to be the same following their implementation. While this can be true, in the interests of a successful implementation, leaders should seek to make the change appear as manageable as possible. Closely aligned to the principle of *ensuring change is incremental,* Principal Klaus consistently reminded his staff that “85% of it is the same.” Key elements of teaching do undergo some change when teachers inhabit an ILE but the majority of it remains the same.

An approach I use with teachers to ensure they see change as being manageable is to advise them to begin co-teaching in one small area of the curriculum (reading or maths for example), “Rather than attempting to change practice in all learning areas, all day, every day,” I tell them, “Do one thing and do it well.” If teams work in a small area (one reading lesson a day) they are more likely to be successful because they control the variables, make the change more manageable and therefore are in a better position to take confidence from finding early wins. This confidence is often self-fulfilling, giving teams the confidence to try similar approaches in a second curriculum area, then a third, and so on.

When team leader Jopling returned to Ōpapa School half-way through their ILE implementation (as well as bringing trust in her as a middle leader) Principal Klaus was impressed by her ability to bring “a huge clarity” to what the team was doing. Asking questions like "Why do you do that?" and "Is there a better way of doing it?" Jopling used her team's answers to narrow the area of focus for the team by removing unnecessary effort and putting in place constraints that made the change more manageable. Watching this process, Principal Klaus realised that, for some teams, having all possible options available to them was ultimately disempowering: having a thousand potential ways to do something was worse than only having two or three. By putting in place constraints, Jopling reduced how stretched the team was, which in turn increased the confidence they had in themselves and their practice, which allowed them to "ease into the space" gently. In hindsight, Klaus said it was like the team "had a licence to drive but didn't know how to operate the car": the overwhelming number of options meant they didn't even know how to get started.

As Mangahuia's development gathered momentum, Principal Dmitri experienced a challenge he hadn't anticipated: the need to decrease the rate of change. Conscious of the need to ensure change was incremental and manageable (to keep his team back from the 'red line of exhaustion') he felt pressure from his staff who kept identifying other practices that needed to be adjusted in light of the developments taking place in their learning environments:

> We had this huge conflict of "don't change too much" and yet staff kept saying "Well there's different things we can do" and it would lead into something else.

In the end he tried to find a middle ground between giving his excited staff members opportunities to go further while also keeping a close eye on energy levels and the manageability of what they were developing.

Principal Vikram had to step in to make change more manageable for one of his teams. A naturally distributive leader, Vikram didn't mandate when or how frequently teams should meet, preferring to allow them to find their own routines. One team decided to meet infrequently and began to struggle with their respective workloads as a result. Vikram's natural instinct to let the team work it out for themselves gave way to the need to step in to decrease the level of stress people were feeling:

> Three teachers were working in an unsuccessful model. They all said to me they went home and cried for the first six weeks because it was so hard for them to work out how they were going to operate.

For this team, isolated from each other, struggling with the same challenges but with no way to collaborate on solutions, the change appeared overwhelming, and not at all manageable. To the relief of the team members, Vikram stepped in and told them they were to meet once a week, effective immediately.

5.1.3 Celebrate short-term wins

> Consider a study done at the University of Wisconsin where two bowling teams were recorded on video over a number of games. Each team received a video to study. One team's video showed only those occasions when it made mistakes. The other's showed only those occasions when it performed well. The team that studied its successes improved its score twice as much as the other team. (Aiken & Keller, 2009, p. 6)

Aiken and Keller's example reminds leaders how important *positive* feedback can be but it also reminds them how important the act of celebration is. Undoubtedly the celebration of large project milestones is important, but there is also evidence to show the celebration of smaller, short-term wins might be even more crucial to a change effort's chances of success. Everett Rogers' theory for the diffusion of innovation holds that later adopters often approach innovations with a "skeptical and cautious air," waiting until "almost all of the uncertainty about a new idea" is removed before choosing to adopt it (Rogers, 1995, pp. 249–250). Regular celebration of short-term wins provides these more pragmatic members of a community the ongoing and repeated 'proof of benefit' they need to make the decision to invest precious time and effort into adopting an innovation. Celebration of short-term wins also increases the amount of information participants receive about an innovation, which in turn decreases resistance to that innovation (Rogers, 1995, p. 205).

Isern and Pung also argued that the timeframes often associated with transformational change (three to five years typically) can seem "too distant for managers and employees preoccupied by short-term pressures" (Isern & Pung, 2007, p. 4). To counter this distance, change leaders can take their overall aspirations and convert them into a set of 'waypoints' along the way: where people need to be in six-twelve months rather than three-five years.

Kotter suggests there are at least three characteristics of a good short-term win: it's visible (large numbers of people can see for themselves); it's unambiguous (there can be little argument over it); and it's clearly related to the change effort (Kotter, 1996, pp. 121–122). 'Good' short-term wins achieve a number of different outcomes for a change initiative.

- They provide evidence that sacrifices are worth it: wins greatly help justify the short-term costs involved. As Principal Klaus says: "When you start doing that, you find what you're looking for. There's lots of wins. There's lots of strengths."
- They reward change agents with a pat on the back: After a lot of hard work, positive feedback builds morale and motivation. Principal Klaus actively sought out people to give them private one-on-one feedback that their efforts had been noticed and appreciated: "When I go into hubs, I talk about how well hubs are doing." Rather than giving *individuals* feedback, Klaus ensures he celebrates *team* victories.
- They help fine-tune vision and strategy. Short-term wins give those leading change concrete data on the viability of their ideas.

  > It gives people that right kind of fuel to say "yeah. This is good. I'm loving this. I'm loving working collaboratively. I love seeing the children and I just see the agency that comes as a result." (Principal Klaus)

- They can convert the uncommitted majority into being supporters of the change while giving cynics and resistors less evidence that dire predictions will come to pass.

  > Continue to supply them with reasons about why we're doing this. What are we seeing and what are we doing? Continue to make improvements. (Principal Klaus)

- They help to build momentum. Offering proof of realised benefits can turn people who are neutral into supporters; those who are reluctant supporters into active helpers. Principal Vikram took time to celebrate short-term wins through regular review sessions:

  > Lots of reviews; sharing more of what was happening. We had a lot of success stories in terms of [one teacher] down in the junior end of the school who doesn't mind sharing. She had to unlearn and relearn a whole lot of things. For them it was all quite new. And being able to share that back; acknowledge it.

Mangahuia School developed the protocol of beginning every professional learning session with 'pumping up the tyres.' These would begin with Dmitri or his deputy principal saying, "Let's share successes. What happened really well this week?" This use of collective time for celebration built confidence, gave later adopters more information to help with their decision-making and shared promising approaches amongst the staff.

Ōpapa developed traditions like gathering as a staff to eat hot chips to celebrate success, but writing each other 'praise postcards' also became a tradition. The postcards contain a hand-written message acknowledging a team member's success and are presented either privately in pigeonholes or publicly at staff briefings. It was these small celebrations, according to Klaus, that gave the team 'fuel' to continue the change.

5.1.4 Diffuse innovation

As initial prototypes then wider forays into new practices continue, promising ideas will emerge. If leaders share these ideas widely throughout their organisations, they achieve two key outcomes: to support the adoption of new practices beyond the small group involved in the initial trial; and to minimise transition costs by providing people with 'tested' solutions to problems they may be experiencing. Everett Rogers' theory of the diffusion of innovative holds that people fit broadly into five categories or "conceptualizations based on observations of reality and designed to make comparisons possible" when they adopt innovations (Rogers, 1995, p. 247). Each of the five adopter categories (innovators, early adopters, early majority, late majority and laggards) has its own characteristics and requirements that must be met for them to adopt and innovation.

Table 5.1

Attributes of Adopter Categories (Rogers, 1995)

Adopter category:	**Key attributes:**
Innovators	• Venturesome and eager to try new ideas. • Often oriented beyond their organisations in the search for new ideas. • Often desire "the hazardous, the rash, the daring, and the risky." • Play an important role launching new ideas into the social system.
Early adopters	• More integrated into the local social system, holding positions as important opinion leaders. • Looked to by others for advice and information about a new idea. • Often serve as role models and decrease uncertainty by adopting new ideas.
Early majority	• Occupy a unique position between the very early and the relatively late to adopt ideas, making them an important link. • May deliberate for some time before completely adopting a new idea, often following with willingness, but seldom

	taking a lead.
Late majority	• Adopt new ideas after the average member of a social system. • Approach innovations with a skeptical and cautious air. • Do not adopt until most others in their social system have done so, and when almost all of the uncertainty about a new idea has been removed.
Laggards	• Last in a social system to adopt an innovation, with a key point of reference being the past. • Decisions are often made in terms of what has been done in previous generations. • Interact primarily with others who also have relatively traditional values. • Their traditional orientation means resistance to innovations is entirely rational from their viewpoint.

I saw the importance of, firstly, understanding adopter categories and secondly, using that understanding to smooth the path to widespread adoption of change during a meeting at one particular school. I'd been working with them for some time before I received an email from the principal:

> We're keen to address our late adopters. We have six staff members who are just behind everyone else's 8 ball... We're keen for you to workshop with them to talk about collaboration in practice, not hiding behind the single class space excuse and also moving from single cell to collaboration.... We're keen for them to have a chance to speak...as in contribute and not sit there and nod and smile and then do nothing.

We found a date in the diary and set up the meeting.

5.1.4.1 The 'laggards' meeting

From the start the body language was frosty. A group of eight teachers had been asked to attend a special session with me. Clearly they were not thrilled about this and I felt they thought they were like students who had been asked to stay back after class.

5.1.4.2 The early majority

I began the session by asking the group what was working well for them. Slightly apprehensive that the answer might be “Nothing!” I hoped we could find some positive things to begin with. I was hoping to build people’s confidence by acknowledging the small initial steps some of them were making. Thankfully a number of people shared things they thought were working well and the group gradually warmed into conversation. Etheline confessed that she was really enjoying having Margaret ‘through the wall’ from her. These two were teaching in two separate classrooms joined by an interconnecting door, but were soon to move to a newly refurbished, truly collaborative environment. They both confessed that while they understood the benefits of co-teaching and enjoyed the collegiality of ‘being neighbours’ they were both apprehensive about inhabiting the same space in a full co-teaching arrangement.

As we were talking, I realised that (despite the principal’s description this group were ‘laggards’) there were probably in the early and late majority category and were proceeding with caution when it came to engaging with change. Etheline and Margaret were nervous about sharing their teaching practice with each other, and were “proceeding tentatively [as] followers rather than leaders” (Rogers, 1995, p. 249).

Seeking a way to reduce the amount of risk involved in the change for them, I drew a diagram on the whiteboard: the ladder of challenge. On the ladder’s five rungs, I asked Etheline and Margaret to place five different actions they could undertake ranked from low risk to high risk. To help them generate ideas I suggested the most high risk thing they could do would be to co-teach all lessons, five days a week; while the most low risk thing they could do was to co-teaching one lesson a week and giving each other feedback on that lesson. Working together they plotted out three other actions, wrote them on the whiteboard ladder then decided to take on ‘risk level two’: teaching writing together three days out of five, beginning the following week. They were thrilled they could make a start with such a modest level of risk and as they began to plan what these writing lessons would look like I marvelled at how paralysing risk can be for people who prefer high levels of certainty.

Atari, on the other hand, was a different kettle of fish.

5.1.4.3 The late majority

It was clear from the start that Atari thought the meeting was a waste of time: his chair was so far back from the table at the start of the session that I couldn't make eye contact with him. When I asked him to bring his chair closer into the table to be part of the group, he sighed loudly and did so grudgingly. During the group's exploration of Etheline and Margaret's situation, Atari pulled out some student work and began grading it. This was going to be a tough sell.

When planning the session with the principal, we'd decided that without her in the room, some of the 'elephants on the table' that were preventing progress might come out more freely, and this was one of my key outcomes for the meeting.

Deciding to capitalise on the positive outcome for Etheline and Margaret, I threw out a provocative question: "So... playing devil's advocate here, why are we even doing this? Co-teaching I mean. What are the reasons for it?"

Silence. People looked at the table or at their notes, avoiding eye contact. I let the question hang for a bit just to make things uncomfortable.

Unable to resist, Atari eventually broke the silence: "Actually I have to agree with the devil's advocate—I don't know why we're doing it. I don't know if it's actually better than teaching on your own."

There it was. The big elephant I figured was there for Atari: the thing preventing him from engaging with the change. The difference between Atari and Etheline and Margaret was that the former hadn't yet found a compelling reason to change while the latter had. They were open to change; they just felt nervous about starting.

Atari approached ILEs with the "skeptical and cautious air" of someone in the late majority (Rogers, 1995, p. 249). I realised that without clear proof of benefit, Atari would continue to resist engaging with change—not because of any kind of personal shortcoming but because his requirements for engaging had not yet been met. The group began to tentatively share potential benefits of co-teaching and, with me weaving in research evidence like the way teacher collaboration can enhance student learning, we ended up talking for about 10 or 15 minutes. I don't know if Atari had a big moment of realisation that it was all

> worth it, but I came to my own realisation: if it was this late in the piece and Atari was still struggling with 'the why' I hadn't done a good enough job of making that clear from the beginning. Maybe Atari wasn't the laggard; maybe it was me.

5.1.4.4 The laggard

At Ōpapa School, Principal Klaus spent a lot of time supporting a late-career teacher who was struggling to cope with the school's innovative learning environments, "going through that change in a massive way." Using Rogers' descriptors, Henry fitted into the laggard category: he was oriented to the past, slow to adopt innovations, and valued traditional approaches (Rogers, 1995, p. 250). Despite Klaus's ongoing support, Henry eventually decided the change was too much for him and decided to retire.

Some months later when I asked Klaus how Henry was enjoying his retirement a smile spread across his face. "You won't believe it," he said. "Henry's one of our staunchest supporters." Curious about what had happened, I asked Klaus to explain. He told me that Henry had taken on part-time work relief teaching, and was surprised to find teachers in schools who were critical of what Ōpapa was trying to achieve. Henry not only felt obliged to defend his old school but also the innovative learning environments they were mid-way through implementing. Henry confessed to Klaus that —even though he personally couldn't make the adjustments needed—they definitely led to great outcomes for students. "It was the hardest year of my life," Henry told Klaus. "But I learnt more in that year than I had in 20 years."

Henry recounted to Klaus with delight some of the arguments he'd had with teachers who were critical:

> You don't know what it's like in an ILE! How can you say that they're not that good. No, they're not noisy. The whole idea of working with somebody else is that you grow yourself professionally. The children get different spaces to learn and then they get more choice around the way they learn. Why would you want a kid to work at a desk all day, every day? That's ridiculous.

Klaus and I reflected on the complexity of the situation of someone like Henry. Often maligned, laggards are no different from other adopter categories, with different motivators and world-views. As Rogers notes, "it is a mistake to imply that laggards are somehow at fault for being relatively late to adopt," their reasons for being reluctant to engage with change are often far more complex than being ascribed to simple belligerence or laziness.

Rogers' framework is useful to help leaders understand the conditions that different groups of people require before they adopt a particular innovation, but even when those conditions are met, adoption is still not certain. There are many reason for this, but Kahn's framework for measuring an employee's level of 'personal engagement' at work is useful as a means to understand one of the other key factors that can limit engagement with change. Kahn found that people engage or disengage at work as a result of asking the following three unconscious questions.

1. How meaningful is it for me to bring myself into this performance?
2. How safe is it to do so?
3. How available am I to do so? (Kahn, 1990, p. 703)

Questions one and two relate directly to principles already examined as part of the theoretical framework: meaningful participation in work (enacting organisational and individual values), and the safety people require before undertaking that work (an environment of trust). Question three—availability—is different however, and offers a possible explanation for why (despite the best efforts of a leadership team) some people remain unable to engage with change.

Mid-way through Ōpapa School's ILE implementation, one of their teachers who had been struggling with the change made the decision to leave the school and take up a new position at a school that had traditional learning environments. This teacher was an experienced, highly capable educator who had taught at the school for a number of years and was well regarded by colleagues. So why did she choose to leave?

She had an elderly parent who required increasing amounts of care.

What Klaus and I reflected on was that the developments occurring at work were less significant than the developments occurring at home for this teacher and she simply wasn't *available* to give the extra effort required by change. In this situation, despite school leadership possessing a good understanding of the adopter categories and the various conditions that have to be met, external factors can still exert enormous impact on whether an employee engages with change or not.

5.1.5 Remove barriers to engaging in change

"*If you want to something new, you have to stop doing something old.*" Peter Drucker.

According to Robinson et al., one of the top strategic leadership activities a principal can engage in is ‘resourcing strategically’, or ensuring organisational resources and attention go where they are needed (Robinson, Hohepa, & Lloyd, 2009, p. 95). While much of the research in this area looks at the hiring of staff with skills aligned to a change effort, lack of skills among staff is only one potential barrier to a successful change process. A lack of resourcing, misaligned organisational structures, lack of professional development or unhelpful team culture might also present barriers for people seeking to engage with change (Bolman & Deal, 1991; Lawson & Price, 2003).

Kotter lists four approaches leaders can take to remove barriers so employees may take “broad-based action” in line with a change effort (Kotter, 1996, Chapter 7). The first is to try to remove *structural* barriers to change by engaging in acts such as “adjusting the weekly schedule to accommodate new priorities.” Principal Dmitri did this when he removed unnecessary, *old* activities from staff members’ weekly responsibilities in order to ensure they were able to focus on new priorities. The old activities that were removed included a paper-based approach for gathering evidence of student learning, which was replaced with a digital one: “I told staff to drop the portfolio book. You can’t keep both.” Principal Klaus removed a different barrier for his staff:

> I did gate duty every morning, because it gave [the teachers] time to be in the spaces working together getting the day set up. We also cut their lunch duties to one a week.

One approach a number of schools employed successfully to support change adoption was to adjust weekly schedules to cut back on whole-school staff meetings, moving staff attention to their team meetings. Talking to principals who did this, many saw that the classroom-based problem-solving that takes place in team meetings as being more important that the organisational-level problem-solving that often takes place in whole-staff meetings. Principal Vikram was unashamed about this:

> More time for their meetings; less time for staff meetings. Simple. We changed to individual hub meetings, to have discussions and planning and other things that they were doing.

Another system that needs adjustment is resourcing, particularly ‘short-term discretionary resourcing’ to provide teachers with extra planning and meeting times in recognition of the increased workload of learning how to do things for the first time. In the same way that extra resourcing should be provided to prototypes (as outlined in

Chapter Four) when rolling change out across the school, the 'short-term' nature of this resourcing is important: if people believe the only reason they can be successful is because of the extra planning time, that resource becomes permanent, increasing the overhead of running the school. But clearly signalled, fixed-term extra resourcing can help teams to bridge the 'implementation dip' and get to the point where new practices have become second-nature and can therefore be performed without extra support. Once a level of fluency and efficiency is attained, that resource can be withdrawn, but in the short term, for Principal Klaus it's about:

> Giving them time to *enable the habit*. I never say no to anyone that wants time ever. For whatever reason they get it.

Another potential barrier to change is a lack of needed training. Leaders should ensure they spend time building what Lawson and Price call "the skills required for change" rather than simply "exhorting employees to behave differently without teaching them how to adapt general instructions to their individual situation" (Lawson & Price, 2003, p. 34). Lawson and Price also advocate breaking down what needs to be known into chunks and gradually building capability; taking control of skill development. "Good intentions are not enough," Aiken and Keller note. Those good intentions need to be followed up with good professional learning and skill building programmes (Aiken & Keller, 2009, p. 109). Principal Klaus attributes a significant part of his school's success to the fact that "the whole way along we never compromised professional learning. We always engaged in professional learning and that was a real core focus for us."

A benefit of this focus on professional development is that Vikram estimated the school accelerated progress by two or three years. Of particular benefit were the specific models and structures teams could explore, including modes of co-teaching, and approaches to planning. Teachers told Vikram that this kind of applied, practical professional learning helped answer questions such as "What do we do? I teach and she marks? How's it going to work?" The potential barrier a lack of training might present is most effectively overcome through targeted professional learning designed to build specific skills.

A third barrier Kotter warned change leaders about is a lack of alignment between systems and vision. Often management systems in schools are designed to support the status quo, not necessarily the way things are *becoming*. For instance, in single-class arrangements, swimming lessons are easy to arrange: one creates a roster that accommodates all classes across the week and ensures classes adhere to that timetable. But when there are 70 students in a ‘class’ rather than 25, this approach doesn’t work. Pukeiti School found that simple matters such as library time or swimming lessons needed to adjust to accommodate change. Ultimately the school decided to minimise disruption by bringing in external swimming instructors so larger groups could be accommodated, which demonstrated a commitment to ensuring systems are adjusted to be aligned with the school’s vision. Similarly, professional learning moved from being primarily individual to being primarily undertaken in Professional Learning Groups to better reflect the school’s collaborative vision. When teams realised that collaborative planning was far more effective when done online, that insight was shared and senior leadership mandated that all teams moved to online planning. As sharing what is working between teams became increasingly important, Pukeiti School adjusted their professional learning so sharing could become central to staff meetings. Principal Vikram describes the change:

> We’ve had three staff meetings where we’ve gone: “What model are you doing in your hub?” And they’ve had to talk about it. “What are *you* doing? What are *you* doing?” Then we’ve gone across and done a vertical integration. “What’s working well for you and what model are you using?”

In structuring staff meetings like this, Principal Vikram created space for people to share their insights. He not only offered time for people to reflect on what they were doing and why, but also created communication structures within meetings to share that information.

Principal Dmitri also sought to adjust systems to bring them closer to the vision, but he realised that in doing so, he placed two principles in conflict with each other. A new reporting system was developed to try to provide a better way to manage student learning in the innovative learning environments, but the increased workload and expectations added to the amount of stress teachers were experiencing. Principal Dmitri found he had to reconsider his priorities, concluding that “number one is definitely teacher workload.” Having surveyed the staff he realised that something needed to change: “Previously reports were almost like a small tick box,” but the increased workload generated by this one adjustment meant the whole change project was jeopardised. Consequently reporting expectations were lessened to make the change more incremental, and to (as Heifetz and Linsky put it) “reduce the sense of disorder to a tolerable level" (2002, p. 9).

The final piece of advice Kotter offerred leaders seeking to remove barriers for staff to engage with change was "deal with troublesome supervisors" (Kotter, 1996, p. 112). This principle is slightly problematic in schools. Even if we set aside the label *supervisor* (which carries with it visions of factory workers), education doesn't have the same *hire 'em; fire 'em* mentality common in other sectors, partly because staff turnover has a detrimental impact on student relationships and wellbeing. In schools, this principle might be better phrased as "minimise unnecessary conflict." This conflict might be because a team member refuses to engage with change (despite the leaders' best intentions) but it might also be because of a problematic personality in a co-teaching team. Principal Vikram realised that he had created a team of four teachers: three of whom were good friends plus the team leader. While the team was exploring the best ways to operate in their innovative learning environment, the '3 on 1' friendship dynamic often complicated decision-making pitting friendships against ideas. As Principal Vikram said to me, "In hindsight I put the wrong extra teacher in there. These were all learnings."

What Kotter called "troublesome" acts, Isern and Pung referred to as "negative energy—cynicism and obstructive behavior" and argue it should be confronted and dealt with "especially early in a transformation" (Isern & Pung, 2007, p. 8). In order to ensure a 'de-energising person' doesn't harm a group's level of momentum for a change, Isern and Pung advocated "removing or converting" that person but also ensuring their negative perspective and behaviour are countered by "ensuring that visible successes emerge quickly" (Isern & Pung, 2007, p. 8).

When faced with a choice of either removing or converting a de-energising person, conversion is probably preferable, given the impact removing a teacher can have, as outlined above. Approaches that might be useful in this situation are explored in greater depth under the heading 'Engage with Resistance to Change'.

A team who had decided to stop co-teaching in their innovative learning environment because they'd had a difficult first term were working with me to try to get back on track. In response to my question about what had been happening, a long list of challenges, problems and barriers fell out followed by an admission by the team leader that as a team they had decided to "regroup, and try something again next term," despite next term being 12 weeks away. To me it sounded like they had decided to 'kick the idea down the road' far enough so that co-teaching would be something trivial they might play around with towards the end of the academic year.

After unpacking what had happened for the team, it was clear that there were a large number of structural barriers that hadn't been removed to enable them to properly engage with the change.

- They were operating in a composite class arrangement with two year levels present in the ILE. Students from these year levels were allocated to a particular teacher for pastoral purposes which meant the administrative systems of the school had already created a separation between *my* kids and *your* kids.
- The students' timetables were not aligned so that, for instance, when one year level was out at a specialist music lesson, the other year level remained in class. This left a very limited number of timetable slots when both teachers and year levels were in the same room at the same time, meaning co-teaching opportunities were rare.
- Their curricula were not aligned: each teacher had their own approach to different learning areas and planned, delivered and evaluated their own programmes. What students in one class were learning in writing was different from what students in the other class were learning, even though they were in the same learning environment. During our meeting, one teacher asked the other: "So what *are* you planning to do for maths?" It was clear that they weren't planning together, or even on the same page.

These structural challenges made any kind of co-teaching extremely difficult. An interesting sidenote is the way cognitive dissonance compounded the difficulty of the situation. Puzzled by the difficulty the team were experiencing, the deputy principal recalled that, at the end of the previous year, "They *asked* to be in that space with each other." This may have been the case but, over time, the team mates had redrawn their memories of the same conversation, maintaining that when volunteers were being sought, they hadn't actually asked to be in 'a full ILE'; they had asked to be in classrooms 'near each other,' a recollection that was completely differently from the deputy principal's. They had resolved their dissonance by changing their shared memory of the conversation that led them to co-teach in the first place.

5.2 Reaction

Make use of time, let not advantage slip.

—Shakespeare, *Venus and Adonis*

Throughout the process of developing and testing the conceptual framework, I arrived at an insight that this moment—this point in the change process—is *the* crucial moment. Even with the best preparation, staff require support to ensure that when things get difficult, they don't give in to the temptation to go back to the way things were before: to return to the comfortable and familiar. During the sustaining phase of a change, Kotter warned against "declaring victory too soon" but at this point in the implementation phase, the warning should be "don't declare *defeat* too soon." Have faith and hold true.

I became fascinated with this point in the change process: the shift from action to reaction, and found I wanted to be as present as possible in schools when this negotiation of old and new was occurring. The way I describe this hinge point to others is people are voyaging in a new direction, and it is at precisely this point that they feel they are losing sight of the shore. It's a matter of trusting the planning, the people and direction in which they are moving, but it's also about ensuring the support provided to help people maintain the gains they are making happen in a timely fashion. It can be damaging to a team if they are left to flounder when implementing new practices, but it's equally damaging if they are able to revert back to old, unhelpful practices without some kind of intervention or feedback from senior leadership.

The more I explored this crucial moment, the more I could see that the timing of leadership actions here is vital. In a variation on my insight about the preparing phase, at this point it's not so much *what* you do but *when* you do it.

When people take the first steps in a change journey, they may find themselves somewhere on a spectrum between experiencing some level of success, and feelings of annoyance or frustration that things are not working as planned or hoped. How leaders respond to these reactions is the crucial second part of the implementation phase, the 'reaction' yin to the 'action' yang. Often at Ōhakukura College we felt pressure (from ourselves and others) to default back to the way we'd done things in the past. In any change, when things get difficult, a natural reaction is to go back to the well-worn path, to embrace approaches that are comfortable and familiar. As a leadership team, we realised that this was an ever-present danger, and each slight shift back to the past would erode an aspect of what we were doing. Cumulatively, these seemingly small decisions had the potential to undermine the work as a whole. The senior leadership team saw the danger and we developed a catchphrase to help us stay oriented towards the future: "Let's hold our nerve." We would repeat this phrase to ourselves and each other to reaffirm our confidence that, while new approaches might feel challenging in the short term, our reaction should be to identify problems and solve them, not go running back to the past.

Chapter 3 outlines the importance of adaptive capacity in organisations, but it is highly likely that, even when this is done well, some people will experience transitioning into innovative learning environments as second-order change. When considering how to best support people to make this kind of change, it's important to revisit Waters et al.'s observation that the same change can be experienced as both first-order and second-order by different people (Waters, Marzano, & McNulty, 2003, p. 7). To ensure people are provided with the support most appropriate to their individual needs, leaders must provide both first- and second-order change to the people who need it.

5.2.1 Support first-order change

Support for first-order change is that which centres around helping people solve *cognitive* challenges, or "problems that can be diagnosed and solved, generally within a short time frame, by applying established know-how and procedures" (Heifetz, Grashow, & Linsky, 2009, p. 307). For many teachers, technical or first-order support will be most useful as they seek to navigate new practices and approaches. Principal Klaus went so far as to acknowledge that the change "...is probably going to be initially harder than your single-cell environment but all for the right reasons." The first day in the new learning environment revealed a range of different first-order problem-solving opportunities for Klaus and his team:

> The first day! Kids want to know where to hang their bags up. It's different, but staff didn't think of that. "Miss, where's my desk?" "You don't have a desk." Parents walking in, and children just overwhelmed: suddenly you've seventy children and parents coming in.

Simple issues like where a student should hang their bag or where they should sit become first-order problems for teachers to solve: identify the problem and find a solution. These solutions can either be developed by the team themselves or borrowed and adapted from approaches other teams or schools have employed. In first-order problem-solving, a key role the principal plays is to find ways to put teams in contact with others who have experienced similar problems and developed solutions to them. They can do this by dedicating meeting time to sharing promising approaches, or supporting problem-solving with physical or virtual tours of other schools who might be able to share promising approaches.

While providing lots of first-order technical support, Klaus and I came to realise we didn't provide enough second-order support for change. A guiding principle for Ōpapa School's ILE development was that children's needs come first. An inadvertent message this sent to teachers was that their needs were secondary, something which was not intended and ended up jeopardising the progress we were making. Klaus conceded that possibly:

> It made the adults in the space feel a little bit insignificant. And I didn't communicate that. Never did I want them to feel that they weren't important.

What was needed was more emotional support for teachers as they went through quite an emotional change. They needed to be told they were valued and appreciated; they needed second-order support.

5.2.2 Support second-order change

Some teachers will view changes such as how to arrange and use new types of furniture, or how to work with a different co-teaching partner as first-order changes. Others however, may feel that these kinds of change strike at the heart of how they view themselves, their sense of identity and the established order of things. These people will experience the change as being second order often they will often experience shifts in their sense of identity and in the traditional hierarchies that operate in organisations.

5.2.2.1 Recognise shifts in identity

Alterator and Deed have explored some of ways in which transitioning to innovative learning environment can affect people's sense of identity, concluding that:

> On entry [to an open teaching space], teacher memories of practice and routine are likely to unravel, or at least be challenged. The openness of the space affords breaking from institutional traditions and flexible use of space

and time. (Alterator & Deed, 2013, p. 316)

This feeling that personal competence may unravel echoes Waters et al.'s observation that second-order change can:

> Confront group identities, change working relationships, challenge expertise and competencies, and throw people into stages of "conscious incompetence," none of which is conducive to cooperation, cohesion, and a sense of well-being. (Waters et al., 2003, p. 8)

Transformational change processes often take people from their well-worn habits, demanding the establishment of new approaches and the creation of new paths, not only in their teaching, but also in their identity and the way the relate to others. Innovative learning environments, by their very nature, are more open and collaborative, and often require people to move from seeing themselves primarily as individual teachers to being members of co-teaching teams. As Wenger observes, "[b]uilding an identity consists of negotiating the meanings of our experience of membership in social communities" (Wenger, 1998, p. 145):

> How Ariel experiences her job, how she interprets her position, what she understands about what she does, what she knows, doesn't know, and doesn't try to know—all of these are neither simply individual choices nor simply the result of belonging to [a] social category. Instead, they are negotiated in the course of doing the job and interacting with others. (Wenger, 1998, p. 146)

This observation that we make sense of our jobs in negotiation with others is particularly pertinent for teachers transitioning from single classrooms to innovative learning environments: as the transition occurs, the nature of people's interactions with colleagues changes substantially. Wenger argues that communities of practice are defined through three dimensions of practice: mutual engagement, a joint enterprise and a shared repertoire (Wenger, 1998, p. 82). The act of joining with other teachers and teaching in a collaborative space means educators may be brought face-to-face with others' interpretations of the nature of their *joint enterprise* and their *shared repertoire* of practice. Inconsistencies in practice between educators may lead to previously hidden assumptions being surfaced, requiring teachers to renegotiate their identity in juxtaposition to their colleagues.

Rogers defines this coming together as "teaming," arguing it occurs when groups have "common purpose, common aims and complementary interdependent skills." Teams also see that "their individual accountability is balanced with collective responsibility and interdependency" (Rogers, 2002, p. 48). While offering benefits to members, teams can also result in individuals feeling ambivalent about being members of teams, seeking to "protect themselves from both isolation and engulfment by alternately pulling away from and moving toward their memberships" (Kahn, 1990).

Principal Klaus saw how important it was for people to preserve their sense of individuality even within teams. He described to me how he provided people with *me time* to ensure their individuality was preserved. Klaus and I noted that ensuring people kept a level of authenticity and independence when transitioning into teams was necessary to minimise the impact second-order change had on teachers.

5.2.2.2 Recognise shifts in traditional hierarchies

Alterator and Deed outlined three affordances of open learning environments that may require adjustments in traditional hierarchies: flexibility of space, increased visibility and scrutiny, and de-emphasis of hierarchy. They argued that democratisation of space—the de-emphasising of teacher and student hierarchy—occurs due to:

> Increased negotiations, higher frequency of communication between teachers, as well as teachers and students. The majority of these communications are informal. (Alterator & Deed, 2013, p. 322)

They also noted that "teachers perceived a de-emphasis of hierarchy on account of increased frequency of negotiation in critical moments and immediate resolution" (2013, p. 321). This de-emphasis of hierarchy may result in shifts in the power structures that have traditionally operated within teams: junior team members who find their status is elevated, and senior team members who feel theirs is diminished. An example of this Principal Vikram saw at Pukeiti where senior team members who historically took control of students by 'tucking them under their wing' found they had to distribute responsibility for such students, because the leader couldn't be everywhere at once. The hierarchy shifted because leaders had to trust that other teachers could meet the needs of every student across the hub. "For some," he said, "that's tough."

5.2.2.3 Provide appropriate support

Recognising that people might be experiencing shifts in their sense of identity, or in the traditional hierarchies operating within teams, is the first step towards supporting such people appropriately. The example of 'Henry' given earlier shows how he experienced second-order change at Ōpapa School: his experience defied simple problem/solution thinking—he couldn't seek help because he couldn't put his finger on what the problem was, let alone what a solution might be. Henry wasn't in what Heifetz calls the *productive zone of disequilibrium*; he was well outside the productive zone to the point where stress had stopped him from functioning well. He was experiencing many of the negative consequences of second-order change that Waters et al. (2003) identify.

- Disrupted cooperation, a sense of well being, and cohesion. "Henry would say 'Klaus, I'm really stressed.' And I'd try and extract some of the things that were causing that stress but I don't think he knew himself."
- Confronted group identities. Klaus said, "We had some teachers leave who I felt that possibly their own flair, their own authenticity to teaching had been compromised because it couldn't just be them."
- Changed working relationships. One staff member struggled to talk about what was occurring without bursting into tears, requiring the principal to shift roles from solver of problems to counsellor.
- Challenged expertise and competencies. Even Principal Klaus began to doubt whether he himself had the expertise and competencies to lead the change: "Hand on heart, there were times where I was like 'I don't know if I'm cut out for this...This is too much.'"
- People experiencing *conscious incompetence*. "For my [teachers]... teaching was more challenging for them. It was just that teaching is challenging for them and it's public now."

When considering how to support employees through the impact of adaptive challenges, it's important to return to two observations; firstly that the same change can be experienced as being both first-order and second-order by different people (Waters et al., 2003, p. 7); and secondly, treating adaptive challenges as if they are technical problems is one of the most common failures of leadership (Heifetz, Grashow, & Linsky, 2009, p. 19). When leaders consider the support they provide for employees experiencing change, that consideration should recognise that many people who feel threatened by change are not likely to engage in rational, logical behaviour and decision-making, exhibiting instead "fight, flight or freeze" behaviours because of the stress they are experiencing (Silvasi, 2015, p. 16).

To help leaders consider appropriate forms of support for people experiencing change as first- and second-order I ask them to list all of the different ways in which they might support somebody going through change. Typically they list approaches such as: procedures, coaching, emotional support, operations manuals, cheat sheets, space to talk, step-by-step ‘how to’ documents, research, opportunities to participate, role models, video guides, listening, reassurance, tolerable levels of stress, planning templates, observations and feedback.

I then ask the leaders to categorise these forms of support into two groups: those which are most useful for supporting people going through first-order change and those most useful for second-order change. I make the observation that often any kind of support is better than no support, but some forms of support can be counter-productive. Often the support is categorised in ways similar to Table 5.2.

Table 5.2

Forms of Support for Change

First-order (technical support)	Second-order (adaptive support):
• Step-by-step ‘how to’ documents • Planning templates, • Procedures • Operations manuals • Cheat sheets • Role models, • Video guides • Observations and feedback	• Coaching, • Emotional support • Space to talk • Research • Opportunities to participate • Listening • Reassurance • Tolerable levels of stress

For an example of a form of support that can be counter-productive, consider a teacher being provided with a highly competent role model. As a means of providing an example of practice to which that teacher might aspire, this approach would work well. However, if that teacher is racked with deep concerns about their own practice and their ability to cope with change, viewing an example of exemplary practice might only serve to deepen those feelings of insecurity.

Common to all the approaches in the left-hand column of Table 5.2 is that they are all tools which can be used to resolve *cognitive* challenges: those of the head; or intellectual efforts to resolve a clearly defined technical barrier to practice. Approaches on the right hand side are best used to resolve affective challenges: those of the heart; or personal insecurities about a person’s ability to transition to a new way of being, or a questioning of long-held values and ideals.

However leaders respond to employees who are experiencing second-order change, they should maintain what Heifetz refers to as “tolerable levels of stress” (Heifetz et al., 2009, p. 9). Principal Klaus and I referred to this as ‘buttoning off’ or reducing the rate of change for people, concluding that whether this was appropriate or not depended on the person:

> If the appropriate response is to button off, then button off. If the appropriate response is to go “You’ve got this.” Like [All Black rugby great] Dan Carter, you’re never gonna button off him. You just absolutely back them.”

Balanced against the need to ensure tolerable levels of stress, Klaus and I felt a (self-imposed) imperative to accelerate teacher professional learning in approaches that would lead to the best opportunities for students:

> We could do things slowly because it's good to some degree, but what about the kids [in the school] now? How do we make sure that [while] the kids of tomorrow will get an amazing deal but what about these children today?

Another approach Klaus and I employed to support staff through second-order change was providing emotional support or 'checking in.' In traditional classroom, teachers were largely left on their own because it was assumed they had high levels of technical competence and didn't require much emotional support. Implementing innovative learning environments, Klaus found himself constantly saying to staff:

> Hey you've got heaps of support in that environment; I just want to check in and say how's that support going? How are you coping with being vulnerable? What is it that we can do better?

These 'check-ins' often turned into coaching conversations; with Klaus and the other leaders supporting people to resolve their own challenges, with healthy amounts of reassurance that they, as teachers, had the ability to get through the change and thrive on the other side of it.

Another feature of effective support for people going through second-order change is to acknowledge the grief and loss they may be experiencing. Linsky noted one of the reasons people find adaptive change difficult is because it is about "the distribution of loss" (Linsky, 2009, para. 6), meaning that when significant change occurs, it's likely that some people will lose more than others. At Pukeiti School, Principal Vikram and I talked about where we had experienced 'bite back' (resistance to change) noting that it was mostly from people who were reasonably successful with the approaches they employed previously. At times these people can be the most difficult to bring on board when transitioning to more collaborative ways of working, partly because, while collaboration offers benefits to others, experienced, successful teachers may not stand to gain as much.

Leaders can support people through this grieving process by allowing them to talk about the losses, by helping people to put the losses into perspective ("Yes, we did use that tool for a long time, but computers can do that now.") Another approach is to reframe potential losses into gains by saying things like, "Yes you've lost control of your single class, but now you have others to help you, others for you to mentor and grow."

Redirecting people's attention away from what they might lose towards what they might potentially gain is important to ensure they don't lose sight—in the midst of what might be a tempestuous, emotional experience—of why the change was proposed in the first place.

5.2.3 Engage with resistance to change

Email:

"Hi Mark,
We had a reflective Leaders meeting on Friday and I wondered if you could help with a question. Moving the rocks: how do we provide development or support those who are yet to get it?
[Principal]"

The *rocks* to which this principal is referring are often a natural part of a change process: people who aren't embracing change, or who aren't embracing it fast enough. Researching how people react to change, McKay et al. found that employee reactions can vary over time (across different stages of change implementation), but generally fall into three categories:

- positive (expressions of commitment and receptivity to the change)
- ambivalent (holding conflicting emotions and cognitions about the change), or
- negative (expressions of resistance, stress, or cynicism regarding the change) (McKay, Kuntz, & Näswall, 2013, p. 30).

People who respond to change in primarily negative ways are often referred to as rocks (or any number of other negative epithets), and while this may be an unfair or simplistic characterisation of those employees, it's often these participants who loom largest in the minds of leaders as they embark on a change project: "What do I do if people don't come on board?"

Ford and Ford made the observation that resistance to change is “both natural and neutral” (Ford & Ford, 2009b, p. 1). To the point that it is natural, almost any kind of change to the status quo is bound to encounter some form of resistance, akin to objects acting within the laws of physics: any moving object that collides with another, stationary object generates resistance. In change, just as in physics, resistance is natural. Ford and Ford also argued that resistance to change is not even a new phenomenon, it’s simply an extension of people’s everyday actions: “it is unlikely that...de novo forms of resistance arise in response to change initiatives” (Ford & Ford, 2009b, p. 3). Similarly, the observation that resistance is neutral is strangely liberating: once one sees resistance as being a potentially harmless process that may be without hidden agendas, it removes a lot of the fear that can surround it.

Before exploring how best to engage with resistance to change, it’s worth carefully framing its two central components: resistance and resistors.

5.2.3.1 Framing resistance to change

Resistance to change has been defined as “an adherence to any attitudes or behaviours that thwart organisational change goals” (Chawla & Kelloway, 2004, p. 485), and “any conduct that serves to maintain the status quo in the face of pressure to alter the status quo” (Zaltman & Duncan, 1977, p. 63). Apparently straight-forward definitions like these hint at how resistance to change has traditionally been characterised using negative framing: resistors “*thwart* organisational goals” or act “in the face of pressure.”

Ford, Ford, and D’Amelio (2008) offer an alternative to this conventionally negative view, observing that “historically [resistance to change has] been seen as overwhelmingly negative, and interpretations of it have been “decidedly one sided, in favor of change agents and their sponsors” (p. 362).

Other research suggests that, far from being a destructive force, resistance to change can be useful as a form of feedback:

> It’s true that resistance can be irrational and self-serving. But like it or not, it is an important form of feedback. Dismissing it robs you of a powerful tool as you implement change. (Ford & Ford, 2009a, p. 100)

Or as a means to strengthen the change strategy:

> Importantly, recent research has suggested that resistance to change may add strategic value to change planning and implementation, and should therefore be carefully discerned and managed. (McKay et al., 2013, p. 29)

To these potential benefits of resistance (feedback and the refining of strategy) Ford et al. added a third suggesting that resistance can be viewed as “an indicator of recipient engagement” (Ford et al., 2008, p. 369). In fact, agents may want to consider the absence of resistance as a sign of disengagement and a harbinger of future problems resulting from unthinking acceptance (Knowles, 2004, p. 23). When framing resistance to change, change leaders should not consider it a wholly negative phenomenon.

5.2.3.2 Framing resistors of change

Historically resistors of change have been given many names, none of which are flattering: laggards, rocks, well-poisoners, squeaky wheels, blockers, dinosaurs, curmudgeons. While many leaders prefer employees who are independent thinkers or who are able to question dogma or orthodoxy (cf. Heifetz et al.’s “independent judgement is expected” (2009) as an essential feature of adaptive organisations), many change leaders consider those who challenge the orthodoxy of *their* change initiative as being unduly difficult or uncooperative. As Koller et al. note, resistance to change is often characterised as either an undesirable outcome of a change process (and therefore something to be overcome), or the result of irrational thinking on the parts of those who are resistant (Fenwick, Koller, & Fenwick, 2014, p. 6). Similarly Ford et al. (2008) observe that resistance to change is sometimes portrayed as:

> An unwarranted and detrimental response residing completely “over there, in them” (the change recipients) and arising spontaneously as a reaction to change, independent of the interactions and relationships between the change agents and recipients. (Ford et al., 2008, p. 362).

Rather than marginalising resistors of change as irrational, Heifetz et al. suggest organisational leaders should do the opposite: make resistor’s concerns central to reflection on how successful the change has been. Heifetz et al. argue that the primary responsibility of a leader embarking on a change programme is to *protect* trouble-makers (dissenting voices, or problem-finders) as a way to build the adaptive capacity of organisations (Heifetz et al., 2009, p. 167). If employees don’t feel it is safe to raise concerns or critique the approach being taken, the organisation’s ability to learn will probably be diminished.

Listening carefully to the resistance (rather than dismissing it as being the product of squeaky wheels or curmudgeons) and responding to it in a way that “depersonalizes conflict,” maintaining focus not on people but on issues, it is less likely employees will feel distress and engage in “fight, flee, or freeze” behaviours (Heifetz & Linsky, 2002, p. 64).

The language that leaders use to describe those who resist change sends a strong message about whether contrary or dissenting voices are welcome in the organisation: instead of labelling them *laggards* or *blockers*, we might better refer to them as blue-sky thinkers, voices of reason, challengers, reality checkers, or critical friends. In the past I’ve been as guilty as any when it comes to this kind of characterisation. When asked about where leaders’ energies are best directed when undertaking change, I remember using a phrase I picked up from a colleague: “Don’t water the rocks.” The implication is that leaders shouldn’t waste time on people who aren’t on board with change. I remember enjoying the amusement of people with whom I used the phrase: “Yeah! If you’re not *on* the bus you’re *under* the bus!”

It wasn’t until I was challenged by my principal at the time that I truly thought through the implications of this characterisation:

> Principal: “Hey, there’s something I’ve been thinking about... If we say ‘don’t water the rocks’ doesn’t that mean we don’t believe anyone can learn?”
>
> Me: “Yeah, but maybe they *can* learn but just *choose* not to.”
>
> Principal: “Is it that they’ve *chosen* not to change, or maybe we just haven’t found the right way to get through to them? Maybe it says as much about us as it does about them?”

What I realised was that perhaps the problem didn’t lie with the rocks; perhaps it lay with me. I didn’t use that phrase again.

When engaging with resistance to change, I developed a flowchart (Figure 5.1) that helped me firstly diagnose the type of resistance I was encountering, and secondly respond to that resistance in an appropriate fashion.

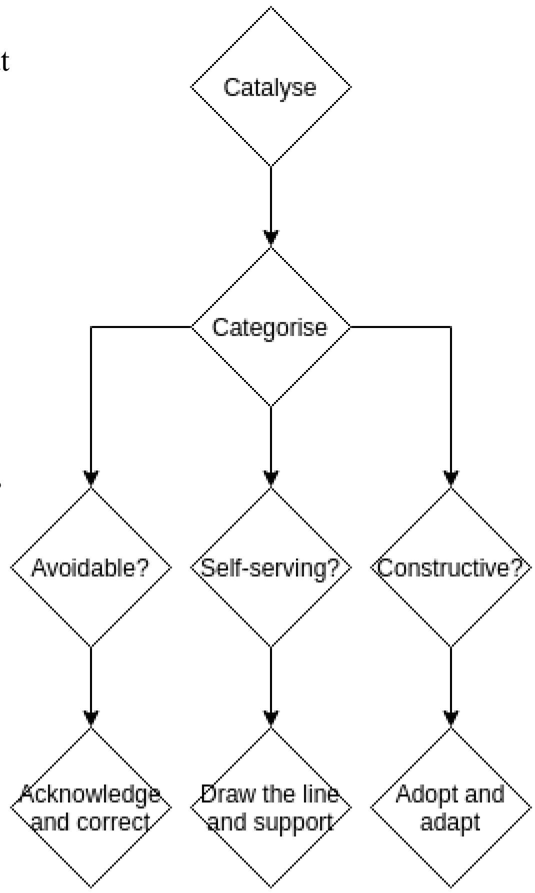

Figure 5.1: Engaging with resistance to change

5.2.3.3 Catalyse resistance

Most of the time, resistance to change is easy to spot because it takes the form of overt, high-energy behaviour (vocal opposition, ridicule of the change among subordinates and peer groups, boycotting change discussions, or sabotage (Lines, 2005, p. 20). In contrast, covert resistance can be more difficult to discern, and may therefore exert a more damaging impact on the change process because leaders are not aware of it and therefore can't engage with it. Examples of covert resistance include reducing output, withholding information (Giangreco & Peccei, 2005, p. 1824), or engaging in what I refer to as 'carpark and copier' conversations: talk designed to undermine the change effort in a hidden, below-the-radar fashion.

Heifetz and Linsky offered strategies for converting covert (or latent) resistance behaviours into overt ones. They suggested "finding a container and cooking the conflict," that is, convening meetings and workshop sessions designed to turn covert resistance into overt resistance so that it may be dealt with (Heifetz & Linsky, 2002, p. 8). If employees are able to ignore change because they are never formally asked to confirm their support for or opposition to it, resistance may remain covert and therefore difficult to work with.

At Ōpapa School, Principal Klaus had one staff member who was skilled at covert resistance:

> [They were] the one who could never make the teacher-only day or the professional learning session that was going to be really poignant to the things that were challenging them. They always got called away... there was a real pattern.

Heeding Heifetz's advice, Klaus found a container (scheduled a meeting with the staff member) and cooked the conflict (described the pattern he was observing and asked if it was accurate). He noted that, from his perspective, it looked as though the staff member was repeatedly disengaging from the change process and then asked the staff member directly about what was occurring. This conversation resulted in the staff member being honest about their misgivings around the project, which resulted in some concrete concerns being identified. Once they were identified, Principal Klaus could set about trying to put them right. The meeting caused conflict and, as Heifetz and Linsky note:

> ...most organizations are allergic to conflict, seeing it primarily as a source of danger, which it certainly can be. But conflict is a necessary part of the change process and, if handled properly, can serve as the engine of progress. (Heifetz & Linsky, 2002, p. 8)

For Klaus, the ‘engine of progress’ was converting latent resistance into overt concerns so they might be addressed, but another important way of catalysing resistance is to make use of the “unexamined, unchallenged cultural assumptions held by members of a school community” (Woolner, McCarter, Wall, & Higgins, 2012, p. 17). Principal Vikram found this with one staff member at Pukeiti School. It wasn’t until he cooked the conflict and began discussing the reasons why this staff member was not engaging with change that they said, “I don’t need to change. My current practice is fine.” Principal Vikram’s observation was that “she believed the way that she did things was spot on,” a view Vikram didn’t share and which gave rise to further conversations about effective practice. Similarly, when Principal Klaus cooked the conflict at Ōpapa School, the following conversation unfolded:

Teacher: “*These kids can’t cope what that!*”

Principal Klaus: “*Why couldn’t you do it with a six year old?*”

Teacher: “*Oh cause they just don’t sit still*”

Principal Klaus: “*Okay if that’s our issue, of not sitting still. How do we still do this? Because I don’t think these kids are sitting still for hours on a day either?*”

The previously unchallenged assumption held by this teacher was that learning was about sitting still for long periods of time, a perspective that Klaus didn’t share, and one that need to be surfaced and examined.

5.2.3.4 Disrupt unhelpful patterns of behaviour

An observation I’ve made in schools is that sometimes it’s possible that participants, without either overtly or covertly resisting change, might remain wedded to behaviours that run counter to the direction of a change. In these cases, it’s not so much resistance that needs to be addressed, but the persistence of otherwise benign patterns of behaviour that are unhelpful. Consider how a teacher who is neither in favour of collaborative teaching nor actively against it, might persist with lesson planning on paper. While this act might not be a deliberately attempt to undermine the change, it still represents a pattern of behaviour that is unhelpful (“If your lesson outlines are in your planning book they’re not available to your co-teaching partners”).

In this sense, as Tushman and O’Reilly noted:

> A culture that once fostered success can quickly become a major barrier to

> change, especially when that culture is confronted with discontinuous and radical change. (Tushman & O'Reilly, 2002, p. 29)

Change is, by its very nature, the abandoning of old ways of doing, thinking and being and the adoption of new ways but, as Kotter notes, "One well-placed blocker can stop an entire change effort" (Kotter, 1996, p. 10). When people continue to engage in unhelpful patterns of behaviour, they weaken the change effort in two ways: firstly change doesn't spread to that person's area of the organisation (undermining extensiveness), and secondly, employees viewing the 'blocker' refusing to engage with change will feel justified in questioning their own commitment to it when others can safely refuse. Kotter recounts an anecdote of a senior leader who was able to continue in the belief that major change was not needed. The effects, according to Kotter were undermining and disempowering:

> Lower-level managers concluded that senior management had misled them about their commitment to transformation, cynicism grew, and the whole effort slowed to a crawl. (Kotter, 1996, p. 11)

As a friend of mine wryly puts it: "Change is hard! If *they* don't have to do it; why should I?"

5.2.3.5 Categorise resistance

Once resistance has been catalysed (surfaced or converted from covert to overt), leaders can begin to analyse the type of resistance that is occurring and respond accordingly. I have observed three different types of resistance to change, each requiring a different response from leaders.

- Avoidable resistance: created or exacerbated by shortcomings in the change implementation process.
- Self-serving resistance: from those who are seeking to place their own interests above those of the organisation.
- Constructive resistance: anchored in genuine concerns about the change, and which can be used to strengthen the change effort.

If leaders don't understand the nature of the resistance they are witnessing, their response can make that resistance worse, which ultimately undermines the change effort.

5.2.3.6 Avoidable resistance to change

Chapters 4 and 5 outline a range of different approaches to preparing and implementing change that, when done well, are likely to decrease employee resistance to change (Choi, 2011, p. 480). These approaches include:

- facilitating participation in (and ownership of) the change process;
- ensuring alignment with organisational (and individual) vision and values;
- building change readiness;
- providing timely and useful information; and
- developing supportive group norms.

If resistance to change occurs because these approaches have been insufficiently implemented (or not implemented at all), the resistance that occurs is best described as 'avoidable.' A leader's failure to prepare employees sufficiently for change, or to keep them well-enough informed about that change can be seen as an example of what Ford et al. warn change leaders about: the breaking of agreements (both implied and explicit) which is likely to lead to increased resistance to change.

> The contribution of change agents to resistance goes beyond the labeling that results from their own sense-making to breaking agreements and violating trust, misrepresentation and other communication breakdowns, and their own resistance to change. (Ford et al., 2008, p. 365)

In this situation, the integrity of the leaders themselves and their commitment to those implied and explicit agreements will probably be questioned. If leaders believe (as Ford et al., 2008 observed above) that resistance to change is something residing completely "over there, in them" (the change recipients) they may fail to see that resistant behaviours may have occurred "through their own actions and inactions, owing to their own ignorance, incompetence, or mismanagement" (Ford et al., 2008, p. 362). Without sufficient analysis of, and reflection on, the resistance that is occurring, leaders may not see that they in fact played a role in generating that resistance in the first place.

5.2.3.7 Response: acknowledge and correct

When avoidable resistance to change occurs, leaders can attempt to restore trust by demonstrating their own fallibility, acknowledging the principles that have not been enacted well in the past and making genuine attempts to address these shortcomings. For instance, if timely and useful information has not been communicated to stakeholders, then inviting those who have been affected to contribute to the development of a communication plan would be a good way to acknowledge and correct the shortcoming. If particular groups have not participated in the design and implementation of the change, then adjusting the make-up of a steering team so that it is more inclusive or representative would remove some of this resistance.

5.2.3.8 Self-serving resistance to change

Even when considerable effort has gone into minimising resistance to change, it's possible participants will resist change in what Oreg describes as "self-serving" ways. He identifies two kinds of self-serving modes of resistance: the first being when "the benefits to the organization are not necessarily consonant with—and are often antithetical to—the interests of the individuals being asked to make the change" (Oreg, 2003, p. 680), which echoes Heifetz's observation that people resist "not change per se, but *loss*" (Heifetz et al., 2009, p. 22). The second mode occurs when individuals resist change *even when* the change is consonant with their interests: they may stand to gain through the process, but nevertheless engage in resistance behaviours. As an attempt to explain this (perhaps irrational) behaviour Oreg proposes a framework comprised of six personality-based sources of resistance:

1. reluctance to lose control;
2. cognitive rigidity;
3. lack of psychological resilience;
4. intolerance to the adjustment period involved in change;
5. preference for low levels of stimulation and novelty; and
6. reluctance to give up old habits. (Oreg, 2003)

The impact of some of these personality-based variables can be minimised, for example by involving people in the design of the new approach so they feel more in control of what is happening, or ensuring the implementation is gradual and incremental to minimise the disruption that occurs in the adjustment period, but other sources are more difficult to work with: reluctance to give up old habits, for instance.

Many old habits are actually useful for change: a teacher who is in the *habit* of planning good lessons, or building good quality relationships with students will probably find these habits useful in a transition to innovative learning environments. Other habits—such as a teacher's preference for working within the four walls of a traditional classroom—will run counter to such change efforts. A key leadership skill in these situations is to be able to tell the difference between helpful and unhelpful patterns of behaviour. Wallace noted that enclosed classrooms:

> Can be organised to reduce interaction between pupils by focussing attention on the teacher. It serves therefore to assist the teacher with the maintenance of social order. (Wallace, 1980, p. 54)

If left unchecked, teachers recreating the 'four walls' of the traditional classroom inside innovative learning environments may undermine the pedagogical vision sitting behind the initiative. A preference for the traditional four walls can sometimes be seen in innovative learning environments when teachers engage in acts such covering up internal glazing with posters, blocking sliding doors so they can't be opened; or placing furniture such as whiteboards, pot plants and shelving units to create internal walls. These are subtle acts of resistance which, when allowed to persist, can undermine change efforts significantly because they are unhelpful patterns of behaviour.

Principal Dmitri found subtle examples of self-serving resistance to change that he felt compelled to address. At the beginning of the school year, some teaching teams were delaying the introduction of personalised timetables until term two in order to give students new to the ILE time to settle in. Dmitri made the observation that only 50% of the students each year were new; the rest had been with the teachers the previous year and were more than capable of running their own timetables. To Dmitri, the delay was harking back to the old ways of doing things: everyone doing the same thing at the same time. In this situation, Dmitri knew a different response was required: he drew the line and supported staff to make the necessary changes.

5.2.3.9 Response: draw the line and support

If an employee's reason for not engaging in a change is simply that they prefer their current practices over new ones (reluctance to give up old habits) leaders who acquiesce run the risk of losing momentum for change. The best way to respond to self-serving resistance to change is to draw a line in the sand and say *as an organisation, we're doing this.* Principal Vikram once described this process to me: "People will push boundaries until you say, 'That is the end. That's the fence and we're not going any further.'"

Having drawn the line in the sand to clearly communicate expectations to employees, leaders also need to support employees to change their practice by using all of the strategies outlined in ‘Remove barriers to engaging with change’ in Chapter 5 including providing professional learning, short-term discretionary resourcing, etc.

5.2.3.10 Constructive resistance to change

The third and final category of resistance to change can actually serve to improve the quality of a change rather than erode it. As Koller et al. (2014) note, not all resistance to change is irrational, illogical or something to be overcome. In fact resistance to change may be a “logical reaction to a change which makes the employee’s job more difficult” (Fenwick et al., 2014, p. 4). If leaders consider the resistance to be logical and understandable, a leader can choose to either push on with the change or adjust the change in some way—decreasing the rate of change or adjusting direction in response to valid concerns from employees. Principal Klaus described this process as “conceding” and acknowledged it is an underused tool for minimising resistance to change:

> I wish I’d learnt earlier the power of conceding. Not compromising, but not going into every conversation with a “I’m going to win and you’re going to see that what I’m thinking is right.”

An example Klaus used to demonstrate the power of conceding related to the use of technology at Ōpapa School. Implementing iPads across the school was a significant change project for the school but as time went on and more research began to emerge questioning the effectiveness of some ways of using iPads, the staff began to raise questions about how they were being used. Rather than viewing these questions as self-serving resistance, Klaus saw them as being potentially constructive. The research into screen time and other aspects of device use in young children led to Klaus and the team to decrease the use in the junior team and to use the devices primarily as media devices to capture photos and for research. Klaus’s response built trust with the team by demonstrating he was open to new ideas and not fixed in his thinking.

5.2.3.11 Response: adopt and adapt

Klaus demonstrated how leaders can best respond to constructive resistance to change: take that resistance on board (adopt) and use it to enhance the change effort (adapt). Turning resistance into a conversation involving give and take has multiple benefits: it demonstrates reason, avoids the appearance of being ideologically captured, offers further opportunities for people to help write the change story and acknowledges that the change plan is open to positive, constructive change.

Koller, Fenwick, and Fenwick (2013) quote Nadler and Tushman's cautionary question "Does the way a manager extinguishes resistance also unintentionally quell support for a change?" and concluded the answer is yes. If Klaus had dismissed criticism of the school's iPad programme as being unnecessary resistance, choosing to stamp it out rather than take the 'adopt and adapt' approach, he may have found it increasingly difficult to maintain his position as further research evidence emerged. If he were to treat resistors to change unfairly or unjustly, he may have risked his own credibility, but probably also proved Aiken and Keller correct when they noted that "employees will go against their own self-interest if the situation violates other notions they have about fairness and justice" (Aiken & Keller, 2009, p. 106). Klaus was not worried about being wrong or looking bad; his focus remained on the original goal: better outcomes for students. As Ford and Ford note, this is a sign of courageous leadership:

> If you can gain perspective by paying attention to, understanding, and learning from behaviors you perceive as threatening, you will ultimately deliver better results. (Ford & Ford, 2009a, p. 100)

By showing a willingness to meet people halfway, Klaus engendered goodwill amongst staff in a way that 'stamping out' resistance wouldn't have. Klaus realised a lot of resistance to change arguments presented leaders with opportunities to respond constructively. Examples of these are presented in Table 5.3.

Table 5.3

Constructive Responses to Resistance Arguments

Resistance argument:	**Constructive opportunity:**
"We tried this before in the 70s and it didn't work then."	What did we learn from the 1970s and what do we have in place to ensure those things don't happen again?
"I'm too busy for this; I don't have enough time to do it."	If the change is seen as adding something new in, without clear signals from leadership about what is being taken away, this is a valid criticism
"This is just [insert name]'s hobby horse"	There isn't a wide enough guiding coalition behind the change.
"This is just another fad. It'll be gone next year."	We haven't aligned change well enough with the organisation's values and history. We haven't spelt out the benefits well enough.
"We've already got X strategic initiatives going on. If we focus on this, which one should we drop?"	We haven't explained how these initiatives are related (with a common set of principles behind them all).
"Parents aren't going to like this. They tell me they want me to focus on X and Y."	We haven't engaged and sought enough feedback from the community. Or if we have, we haven't made staff aware of this feedback.
"Seems like a lot of work when I already get great results without doing the new thing."	People don't seem to understand the potential benefits of the change.

When working with resistance to change, people often feel heartened to know that the challenges they are grappling with have also been well-documented by others implementing ILEs, and have recognised solutions. York-Barr, Ghere, and Sommerness (2007) outline the six most commonly faced challenges when co-teaching.

- Loss of instructional and decision-making autonomy—the ability to 'take the teachable moment' and deviate from what has been planned.
- Decreased flexibility and creativity given a set schedule for when additional instructional personnel will be present in classrooms.
- Increased communication demands given instructional interdependence among teachers.

- Role shifts and confusion about how to share instructional time (e.g., who leads, who follows, how to co-teach) and how to share responsibilities (e.g., assessment, reporting).
- Feelings of insecurity because teaching became public and teachers were expected to work with more diverse students than they had in the past.
- Differing "philosophies," or beliefs about instruction and professional practice (York-Barr et al., 2007, p. 318).

Making teachers aware of these challenges commonly faced when co-teaching achieves two important outcomes: reassuring people they are not the first to encounter these challenges; and legitimising constructive resistance to change: others have noted these problems—the challenge now is to find solutions.

During a question and answer session at the end of a parent information evening some of the questions became quite testy. A group of parents who were critical of the approach being taken by this particular school took the opportunity to use the session as a soapbox for their concerns. Some of the questions were alarmist and self-serving but others had constructive elements to them. Reviewing the questions later, I began to categorise them into the three main types of resistance to change as a way of considering how best to respond.

Table 5.4

Responses to Resistance Arguments

Audience comment:	**Interpretation:**
"*I've got major alarm bells ringing.*"	Self-serving: concerns about what? Please elaborate.
"*How can we be sure that we aren't creating some kind of disaster in the future?*"	Avoidable: clearly people aren't aware of the research into the connection between learning and environments.
"*What if students with bad behaviour disrupt the learning of all 90 children in a learning environment?*"	Constructive: the school certainly hasn't communicated their approach to behaviour management (if they have one) to parents well enough.
"*Students managing their own learning won't push themselves.*"	Avoidable: this has nothing to do with environments, but indicates a lack of understanding of learner agency (a core value for this school).
"*That study you talked about, what was the name of the school?*" 'Churchie Grammar School in Brisbane' "*I don't think we're the same as a private, elitist religious school.*"	Avoidable: parents ignored the other research in the presentation to focus on this one study. Everyone should be aware of the weight of research evidence rather than a single study.
"*I've been teaching for forty years. This idea that there is an 'industrial' way of teaching and this new way of teaching is a nonsense.*" (The principal responded by sharing his own experiences as a young teacher, confessing that he had taught his students in a very industrial way by moving through a maths textbook at the same speed for all of his learners.)	Self-serving: the comment revealed more about the person than the project. The implication was there wasn't a problem with how things had been taught in the past, therefore there is no need to change. This comment was from a teacher in a conservative school nearby; was she protecting their reputation? Concerned about the impact on her if new approaches to learning took hold?
"*We tried all this in the 70s with open plan and it didn't work then either. Why are we making the same mistakes again?*"	Avoidable/constructive: I referenced (O'Reilly, 2016) to point out what we know about the shortcomings of the open plan movement in New Zealand and to say that if we reproduce these failings in the current designs, we haven't moved very far.

Processing the parent responses in this way helped me to test my theories on resistance to change, but it also gave me an opportunity to think about how schools could prevent avoidable resistance from occurring in the first place. To this end I developed an 'email series' which is sent to participants every one or two weeks with snippets of information about either pedagogy or future-focused education so the snippets can be shared with parents through newsletters or social media. By increasing the quality and volume of background information parents have ahead of information evenings, avoidable resistance should be decreased and the quality of questioning should increase. For example, a parent who knows that collaborative learning (where students work in groups with each other) leads to better outcomes than individualistic or competitive learning should have a better understanding of one of the key principles behind contemporary teaching practice.

Q&A session on change leadership with a school leadership academy:

Question:

"*What about people who are really slippery? You know—everyone agrees what needs to be done and all of that sort of stuff but they're just slippery; you keep following them up but they never quite get it done.*"

Answer:

"Yeah that's a tricky one. Aside from all of the really obvious things like clearly establishing goals and action plans and deadlines and clarity over who is doing what by when, the thing it makes me think about is whether they're truly committed to that change. Have they really got 'the why'? Do they really believe in it? For me that's probably about ceremonial compliance: they'll do it when someone's looking but they don't truly believe in it so they go back to what they've always done. Go back to the why."

Question:

"*What about those people who just love to sit off to the side and criticise—they're the squeaky wheel, but they never really get on board, they're just happy to criticise?*"

Answer:

"Yeah, we have to remember that we can minimise resistance to change by building readiness, working from values, showing the change is appropriate, all that sort of stuff... and the presence of resistance is not necessarily a bad thing. It might be valuable feedback for us that we haven't done a good enough job in those areas. But even if you've done that stuff, there will probably be people who push back. First of all you need to identify where that resistance is coming from. Resistance can be irrational and self-serving: "I don't want to change. Can't be bothered." Some people love the shiny and new and some people just prefer the comfortable and familiar. It's tempting to just close those people down; to say 'Just drink the Koolaid. Get on board. Stop being difficult.' But this kind of resistance can be a sign of intelligent engagement and dare I say it critical thinking, which is what we want. We have to consider that they might actually be right with their criticism; they might be the only person who is brave enough to say 'The Emperor's wearing no clothes.' But there may be what I call a kernel of truth in their resistance. They might say. "We're too busy for this. This is yet another thing we have to do." Perhaps we haven't done a good enough job of taking things away so people can engage with the change, or haven't spent enough time spelling out the benefits or improvements we're expecting to see. People might say, "I tried this before and it didn't work." Well what did you try, and why wasn't it successful? Have we demonstrated clearly enough that this time around we've learnt lessons from previous attempts and that we've got things in place to ensure we don't hit the same barriers again?"

Question:

"What are the key difference between what happens in business when leading change and what happens in schools? Obviously schools are not businesses, so what keeps coming through as being the key difference?"

Answer:

"Yeah schools are not businesses and so while some of the research into human psychology translates directly, some other research doesn't. The key things that come through for me are that business is a zero-sum game: if I get the sale, you lose the sale. Whereas education isn't a zero sum game. The more we share with each other the better each teacher and each school can be. The second is the approach to hiring and firing. In business if someone is not aligned with the change, bosses just get rid of them. There's a saying that 'if you're not on the bus, you're under the bus'. Well we don't do that in education because we've got relationships with kids to think about. What we'd probably do is work to ensure the change is aligned to organisational and personal values, then make sure that the person is aware that this is the direction the school will be moving in for the foreseeable future so if it's not aligned with what you're about, you can be the one to make the decision about moving on. Probably the third thing that is different is that business uses rewards to reinforce behaviour a lot more: if someone's doing a good job of enacting the change, you give them a $5000 bonus. We don't do that because that's performance pay and we know that's a really thorny issue. How do you define and measure the performance of a teacher? Results is one thing, but changing lives is another. Hard to put a price on that.

Great questions. We've run out of time unfortunately, but thanks for being part of this group and good luck for the future. Get in touch if you need anything else."

5.2.4 Encourage knowledge-building

Throughout a transformational change process, participants are constantly asked to engage in the dual acts of learning and knowledge-building. Summarising Scardamalia and Bereiter's work, van Aalst defined learning as "the process by which people acquire the intellectual heritage of their community," while knowledge building is defined as "[an] effort to extend the frontier of what is known" (van Aalst, 2012, p. 221).

When applied to the activities a school might undertake to successfully implement innovative learning environments, teachers might look at approaches other schools have taken ('learning') but they will also need to adapt those approaches and invent new ways of doing things when those existing approaches prove insufficient (engage in 'knowledge building').

One observation I have made about the schools I believe are good at 'learning' is that, in those schools, principals work hard to help teams solve the first-order problems they face. Such schools actively encourage "visiting my school; visiting other schools" to provide teams with access to strategies that colleagues (in their own and other schools) are employing in their ILEs. This gives teams a wide pool of potential practices from which to draw when they consider solutions to the first-order problems they are facing.

Second-order challenges require a different approach; a *knowledge-building* *approach* because they often require "new knowledge and skills to implement" (Waters et al., 2003, p. 7). To support teams to create new knowledge when required, the most effective schools deliberately foster knowledge-building discourses. According to Scardamalia and Bereiter, knowledge building discourse attempts to achieve "progress in the state of knowledge" or *idea improvement* and has three defining features.

- A commitment to progress (something that does not characterise dinner party conversation).
- A commitment to seek common understanding rather than merely agreement.
- A commitment to expand the base of accepted facts (Scardamalia & Bereiter, 2006, p. 109).

Researchers have noted that knowledge-building discourse is characterised by two important processes: firstly a movement from *individual* knowing to *collective* or organisational knowing. Nonaka and von Krogh argued that this form of knowledge building is "the process of making available and amplifying knowledge created by individuals as well as crystallizing and connecting it to an organization's knowledge system" (Nonaka & von Krogh, 2009, p. 635). A second key feature of knowledge-building discourses is that they involve the conversion of *tacit* knowledge to *explicit* knowledge. In the field of information and knowledge management, explicit knowledge is that which can be "easily communicated and shared" while tacit knowledge is that which is "highly personal and hard to formalise. Subjective insights, intuitions and hunches fall into this category of knowledge" (Nonaka & Takeuchi, 1995, p. 8).

Schools that successfully foster knowledge-building discourses to support staff to solve second-order challenges routinely do two things well: they allocate extra resource (time) to team problem-solving and knowledge-building; and they provide professional learning and tools to help teams generate new knowledge, such as open-to-learning conversations (Robinson, 2015) or crucial conversations (Patterson, Grenny, McMillan, & Switzler, 2012). Without both the time and the means to create new knowledge, teams struggle to do so.

5.2.4.1 Promote sense-making

Inseparable from knowledge-building is the process of *sense-making,* which is defined as how people "structure the unknown" (Weick, 1995, p. 4), or the process of "turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action" (Weick, Sutcliffe, & Obstfeld, 2005, p. 409). Weick et al. assert that the two central questions people ask when sense-making are, "What's going on here?" and, "What do I do next?" (Weick et al., 2005, p. 413). More fully defined, the process of sense-making:

- starts with noticing and bracketing
- organises flux
- is about labelling
- is retrospective
- is about presumption
- is about organising through communication
- is about action (Weick et al., 2005).

In the early days of Pukeiti School's ILE implementation, there were many areas of flux that required sense-making. Principal Vikram and his team worked through areas including:

- Operational issues such as how three teachers take attendance rolls: "You've got seventy kids, do we all sit for 15 minutes taking a roll?"
- Pedagogical issues: "When students were given choices, they all ran to the iPads. Teachers realised they needed to be more structured with the freedoms they were giving."
- Collaboration issues: "How do you use three teachers in the classroom? Do we all teach the same thing?"

To resolve these challenges, teachers needed to either learn from what other teachers and schools were doing, or engage in knowledge-building to create their own solutions. Principal Dmitri observed a tension between these two approaches as teachers were keen to import templates that others had developed because ready-made solutions seemed easier in the short term: "Give me the template," teachers would say, "I'll fit my things into the template," but these imported solutions often proved frustrating and inadequate, particularly when used as solutions for second-order challenges.

An important moment of sense-making in my own ILE teaching occurred when I observed a colleague—a teacher named Serge—trying something new. During academic mentoring sessions, I'd struggled to keep the students who needed the most support focused and on task, often finding they had drifted away from my area of the learning environment and were distracting others or playing games on computers. When walking through Serge's learning environment, I noticed he had arranged his furniture into a long 'kitchen table' formation with his students gathered around him. When I saw this arrangement, a number of things fell into place for me. The first was that in my efforts to make the best use of the flexible learning spaces available to students, I'd let them learn wherever they wanted; I hadn't kept them in tight physical proximity to me to I could keep them focused and on task.

When I saw how Serge had arranged his furniture, I asked him about it, observing it might be an effective way for me to resolve the challenge I was facing. In conversation with Serge, the sense-making process began to unfold: I converted a vague, tacit annoyance into an explicit problem statement: "My students are not focused enough during mentoring and my use of the environment may be exacerbating the issue." I labelled the flux of my recent experience; and began to organise my thoughts through communication with Serge; and was able to place a label on a potential solution, finding a springboard into action: all features of the sense-making process. During the next mentoring session I arranged my desks how Serge had—into a kitchen table formation —and that was the way it remained for the rest of my time at Ōkahukura College: a tight family group which students could leave only with a very good excuse.

A key reason I was able to achieve this piece of sense-making was that I had a serendipitous conversation with Serge. Not content to rely on chance to facilitate sense-making, Principal Vikram introduced what he called "'class swaps" or teacher exchanges within the school. For two days each semester one member of a teaching team swaps classes with a teacher from another area of the school; after which the second member gets replaced for the next two days. Because each team has at least one team member remain throughout, the routines and relationships within the class are maintained, but the exchange gives an opportunity for a member of staff outside that team to teach in the room for two days. The purpose was originally to see 'how the other half live' but Vikram quickly realised these swap provided a powerful sense-making opportunity. When fresh eyes come into a space, two things occur: the new teacher gains a deeper understanding of the challenges faced by the team; and the fresh eyes have an opportunity to ask, "Why do you do it like that?" Vikram also realised the school could strengthen sense-making by ensuring staff have time to talk about what they saw in classroom practice: "Why did you choose to use that space like that?", or, "I wondered if it might be more successful if we moved those resources over to the other side."

At Ōpapa School, the leadership team consciously modelled sense-making to ensure staff felt empowered to engage in it themselves, publicly adopting the 'FAIL' or First Attempt In Learning. Klaus recalled a staff meeting which he could only describe as "a complete and utter balls up." He openly said to the team "Hey there's my FAIL. Let's giggle and laugh and move on." The importance of this public sense-making (and honesty) is, as Klaus said, "We have to model the behaviour that we want from our teachers." When senior leaders do this, the level of anxiety teachers feel about 'getting things wrong' decreases.

Vikram also realised sense-making can be hampered by staff members deferring to the principal or other senior leaders if they are in the room. To counter this, Vikram released his team leaders off site for a day to reflect on the year's collaborative teaching. All appreciated the time to sit and talk to each other about the issues they were facing; coming back with extensive minutes from their discussions and a set of recommendations for the following year. Not having the principal or deputy principal in the room empowered them by ensuring they knew the responsibility for decision-making was theirs.

Teaching in ILEs provides teachers with sense-making opportunities that are not available in traditional classrooms: the ability to see others teach and lead means the noticing, labelling, reflecting, communicating, and acting required for sense-making are all more possible than when practice is hidden behind the four walls of a cellular classroom.

5.2.4.2 Engage in sense-giving

In addition to providing people with time and tools to sense-make, leaders can further support the process by providing participants with "preferred interpretive schemes" (Gioia & Chittipeddi, 1991, p. 434) or proposed ways of interpreting events and their meaning: a practice known as sense-*giving*. Kotter argued that if leaders do not provide these 'preferred interpretive schemes' as a "conscious attempt to show people how specific behaviors and attitudes have helped improve performance", people "can easily create inaccurate links" (Kotter, 1996, p. 14).

Weick defined sense-giving as "a sense-making variant undertaken to create meanings for a target audience" (Weick, 1995, p. 416), while Canato, Ravasi, and Phillips argued that, in a change process, if sense-giving efforts are centred on ensuring people within the organisation understand the "importance and benefits of the new practices" (Canato et al., 2013, p. 1731) and the alignment of new practices to organisational values, those practices are more likely to be adopted, rather than abandoned or modified (2013, p. 1747).

To the uninitiated observer, a teacher who has students spread across different spaces within an ILE might seem disorganised or unfocused in their practice. But if the observer is aware that this teacher is seeking to improve the range of differentiation strategies they employ in their teaching, the 'flux' of experience suddenly becomes ordered: there's method in the apparent madness. The crucial difference between the observer interpreting the scene as one of chaos or order is whether sense-giving has occurred. Sense-giving is 'interpretive work' whereby people collectively attempt to make sense of "what is going on around them and how they should respond" (Balogun & Johnson, 2004, p. 524) by tentatively attributing meaning to their experiences (Weick et al., 2005, p. 411).

Skilful leaders can support this tentative attribution of meaning by guiding participants "toward a 'preferred redefinition of the organizational reality' " (Gioia & Chittipeddi, 1991, p. 442). Principal Klaus found he had to do exactly this when one teacher began to voice her resentment of the increased planning and communication demands of collaborative teaching. Klaus engaged in sense-giving by noting that while elements of the job had become more onerous, the benefits were worth it. Earlier that year, that same staff member had to take leave during a period of extended illness, but benefited from being in a collaborative team because all students continued to make good progress despite this teacher's absence. Klaus found himself sense-giving to help the staff member see aspects of the situation they hadn't considered:

> It's the good with the bad... "Yes, that's difficult. But how good is it knowing that if we can't be here or someone's sick those children aren't having a wasted day?"

As well as engaging in ad hoc, sense-giving conversations, Principal Klaus found deliberate use of metaphors and analogies worked as a powerful way to support sense-making. One of the metaphors he used often was the notion of teams 'building their fitness'; an idea he would return to again and again. A sporting metaphor, this phrase reminds staff of the importance of training for a big game or a big event, particularly when things got difficult. In the same way that athletes can't expect to pull on a pair of shoes and run a half-marathon, teachers shouldn't expect to change the way they teach without putting some ongoing effort into developing the capabilities for that change. Principal Klaus would regularly remind people that, "This is probably going to be initially harder than your single-cell environment but all for the right reasons. You're building your fitness."

Another preferred interpretive scheme Klaus employed to help people make sense of what was happening linked collaborative teams to families:

> In these spaces we're a lot like a family. These are some of the behaviours and feelings that happen within a family: they're normal. It took away the guilt for people: "I shouldn't feel like this, but I guess it happens in families."

To be more proactive in our sense-giving efforts at Ōkahukura College, the leadership team made use of an approach called *shadow-coaching* whereby a more experienced teacher would sit alongside a classroom teacher as they observed teaching occurring in other areas of the school. The role of the senior leader was to ask questions about what was happening, and to offer commentary and explanation where necessary. These dual acts of provoking sense-making (through questioning), and providing sense-*giving* (through commentary) ensured maximum value resulted from classroom observations. The leadership realised engaging in smaller, ongoing acts of sense-giving led to better outcomes than having fewer, 'big' lessons, an observation Ōpapa School made too. Principal Klaus noted: "Big lessons are learnt from lots of small ones along the way. I don't think anyone learns a big lesson from one-off incidences."

In innovative learning environments, sense-making is intrinsically linked to the affordances present in the environment. As Alterator and Deed noted, "[t]he affordances of a context must be perceived by an individual who must also have the abilities to interact with these attributes" (Alterator & Deed, 2013, p. 316). The perceiving of affordances (a necessary precursor to a person being able to interact with that affordance) can be significantly enhanced by careful and deliberate sense-giving:

> That's not just a sliding glass partition to separate two classes; that's a new opportunity for you to differentiate instruction in ways you've never had before.

When principals (and other leaders) provide preferred interpretive schemes for the possibilities that exist in an environment, they support teachers to take the first steps towards being able use learning spaces more effectively.

Sense-giving is also useful to address challenges not related to the environment as well. Principal Vikram had to challenge some inaccurate links staff members were drawing between the new learning environments and problematic behaviour by students. Vikram addressed the inaccurate links by saying:

> [Some of] these kids are finding school bloody challenging for a number of reasons, mostly poverty. Cooperative teaching, single cell teaching, sitting out in the open: it's not going to make a difference here.

Some staff members were mis-attributing poverty-related behavioural problems to the innovative learning environments, an interpretation Vikram was happy to challenge. Similarly, when teachers would say, "Co-operative teaching doesn't suit these kids," Vikram would respond, "Well neither does single cell." The sense-giving message was: "Sometimes our challenges are not caused by the learning environment; sometimes the cause lies elsewhere and we need to keep our confirmation bias in check."

On another occasion when I was working with a principal to plan a professional learning day with staff moving into a new learning environment, his part of the day was to outline in his view what was likely to happen over the coming months. He chose to focus particularly on the way people respond to first- and second-order change. As I listened, I realised that a powerful piece of sense-giving was taking place. He was offering a "preferred interpretive scheme" for teachers to ensure that if (or when) they experienced second-order change they shouldn't view this as evidence that something had gone wrong in the process; rather it should viewed as something that was natural and to be expected. The message was that teachers should be aware of the need to provide each other support as the effects of change began to be felt. As a result of the principal's sense-giving efforts, the staff now had a shared framework for making sense of what they might experience in the future.

Some months into Ōpapa School's change journey, Principal Klaus realised that a group of parents had arrived at an inaccurate conclusion regarding the departure of several staff members:

> No one really left through being overly aggrieved. People retired. People went to [another school] which was doing what we were doing but on steroids and another person left to care for a family member.

Nevertheless these departures added up to a total of six staff over the course of one year, leading some members of the community to wonder (in Klaus's words): "Hang on a minute. What's going on here?" When Klaus realised some had reached the incorrect conclusion an exodus was under way and that it was being caused by the school's new learning environments he knew he had to engage in sense-giving, providing people with "the real story." He began to systematically communicate to parents the reasons for each staff member's departure: retirement; going to another school with similar environments; leaving to care for a family member.

As well as using sense-giving to promote the adoption of new practices, Klaus also began to use it to prevent a gradual reversion to old approaches. As Isern and Pung noted, if these "established orthodoxies" are not broken, change is unlikely to be successful (Isern & Pung, 2007, p. 6). To use sense-giving as a way of preventing established orthodoxies from slipping back into practice (allowing what one of my key informants refers to as "the slow burn towards disengagement"), Klaus began to talk to teams, identifying areas where old practices were creeping back in. One team, rather than using the full range of the environments available, began creating their own classrooms within classrooms: "Slowly I started to see 'camping' back at tables."

In conversation, Klaus deliberately described this practice as 'camping', providing an interpretation teachers may not have seen themselves. In doing so, Klaus achieved two potential outcomes: if staff *weren't* aware it was occurring, Klaus helped them see to it; but if they *were* aware it was occurring, he let them know he was aware of it and it wasn't going to be ignored because it decreased what was possible in the learning environments.

Another example of sense-giving took place in Pukeiti School when a group of teachers found they were having problems with library sessions for their classes. Towards the end of the sessions there was a rush to issue books to two classes worth of students which began to cause disruption. Rather than looking for new ways to solve the problem, the two teachers made a unilateral decision that they would go to the library as two separate classes—re-establishing an old orthodoxy. Principal Vikram engaged in a sense-giving conversation to highlight the fact that they were using old ways of thinking to solve the problem, and their decision was going to make co-teaching more difficult because they'd would lose two periods of co-teaching time rather than one. He suggested that they start issuing books earlier, concluding that perhaps the challenge had presented the teachers with an opportunity to pull back from co-teaching a bit, starting the slow burn to disengagement.

Vikram also found sense-giving was necessary at Pukeiti School when two teachers with different styles were paired together. One was noticeably louder than the other when giving students instructions and was more tolerant of boisterous student behaviour. The second teacher was quieter with a preference for a more settled environment, a situation that gave rise to increasing levels of tension between the two. Vikram began to release the team leader more often so they could spend more time in the learning environment to support sense-making through sense-giving. The team leader found opportunities to make observations such as “Hey, it’s a bit noisy” to the team, which were followed by a session on re-establishing agreed expectations around how much is too much noise, and what the team’s professional obligations to each other were (“No shouting instructions loudly across the room while the other is trying to run a reading group”).

The team leader was able to offer a ‘preferred interpretive scheme’ for what was occurring, which then generated a ‘springboard into action’ ultimately resulting in the team being in a stronger position to achieve their goals.

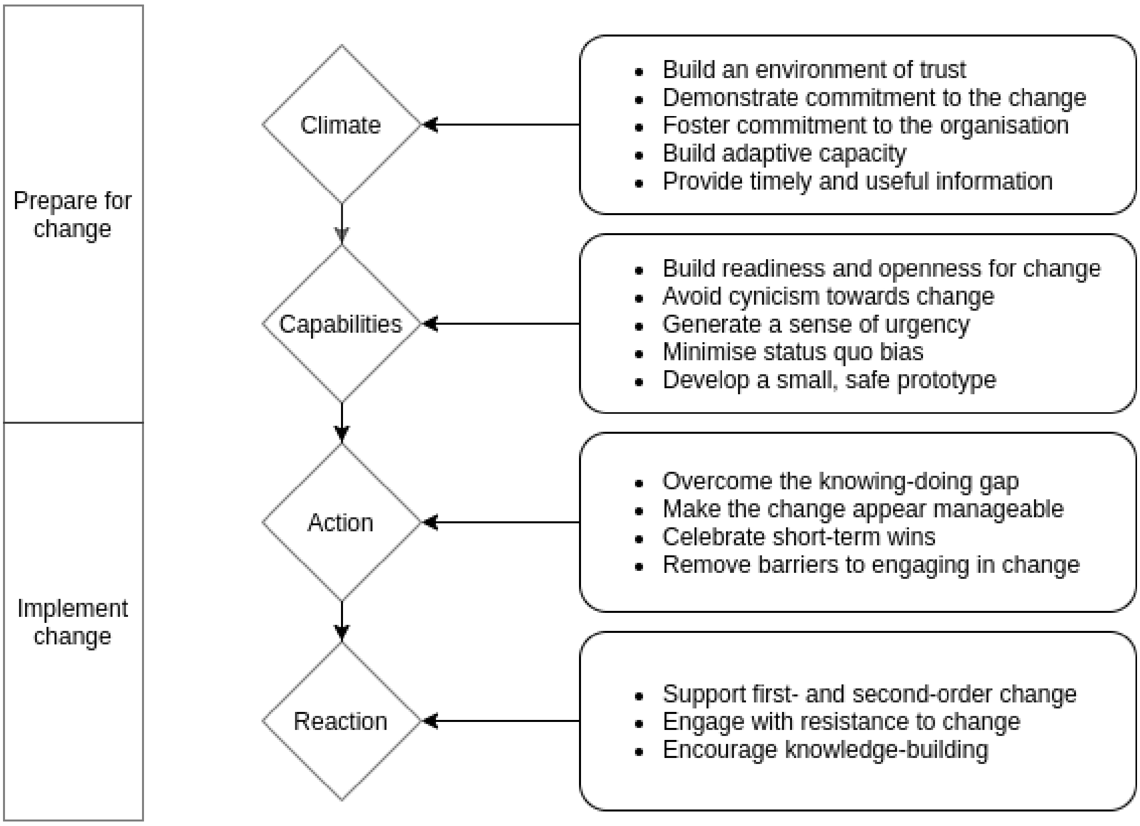

Figure 5.2: Conceptual framework (implementing change)

At this point in an innovative learning environment implementation, the conceptual framework (Figure 5.2) covers the preparing and implementing phases. The action/reaction dynamic, when managed carefully should have tilted the playing-field towards progress and success rather than dissatisfaction and regression.

With progress being made across the organisation, the next challenge for leaders is to ensure those gains are consolidated and embedded into organisational practice to the point where they can not be challenged by any one of the myriad threats that complex organisations and contexts can present to a nascent change effort. At this point, leaders must ensure the change is embedded and sustained.

6 Chapter 6: Findings and Discussion (Sustaining Change)

To-morrow, and to-morrow, and to-morrow.

—Shakespeare, *Macbeth*

One of the cautionary tales I heard early in my innovative learning environment journey was of a school that had established a progressive approach to learning under the leadership of an experienced, well-respected principal. The school's approach to the use of learning environments was revolutionary at the time, with moveable walls that allowed the creation of larger or smaller learning spaces and which facilitated teams of teachers to work together on interdisciplinary projects. The reason this school emerged as a cautionary tale was that the charismatic, highly skilled principal retired a few years after the school was established. You couldn't begrudge her decision to retire: she'd certainly contributed a lot to education, but following her departure the momentum established at the school seemed to falter and they never quite attained the heights suggested by their initial trajectory. For me it illustrated how several years' worth of progress can be undone if a change is not consolidated and embedded sufficiently.

Sustaining change beyond an initial flurry of activity is notoriously difficult. Beer and Nohria suggest that few companies are as successful as they would like to be when it comes to sustaining change over time: "The brutal fact is that about 70% of all change initiatives fail" (Beer & Nohria, 2000, p. 133). Kotter sounded a similar warning to leaders, suggesting that to completely embed a change throughout an organisation it might take three to ten years, and until it is fully embedded, a new approach is "fragile and subject to regression" (Kotter, 1996, p. 13). Kotter argued that regression can only be avoided by ensuring the change is so well-anchored into the culture and systems of an organisation that it becomes the new normal.

If it's to be sustained, change needs to be embedded to the point where it lives on after the completion of the implementation plan, and after the senior leaders who originally championed the change have left, retired, or taken up other roles.

6.1 Embed

Change often has to be sustained over a long enough period for new behaviours to become second-nature; for them to be performed automatically. Maintaining collective focus long enough for this to occur is what Principal Klaus referred to as "enabling the habit." Habits are patterns of behaviour so well repeated they become almost involuntary, but development of these patterns requires energy and momentum to be sustained over a long period of time. Principal Dmitri once shared with me his nervousness about the fragility of what Mangahuia School had achieved. In his words: "at the end of the day it would be easy to just revert back to where we were." Aware of situations where this kind of reversion had occurred (including that of the school in my cautionary tale) I joined him in his apprehension and together we spent a lot of time planning how we were going to embed the change so thoroughly into the fabric of the school that this kind of reversion didn't take place. What we were trying to achieve was for the change to become routine practice or "the way we do things around here" (Barth, 2002, p. 6) to ensure it endured beyond us.

6.1.1 Maintain energy for change

Chapter 4 argues that leaders need to generate a sense of urgency in the early stages of a change effort, but researchers also argue that this kind of energy and momentum should be maintained well into the sustaining phase as well. Kotter argued that "whenever you let up before the job is done, critical momentum can be lost and regression may follow" (Kotter, 1996, p. 133). Wimmer (2009) also warned that as a change progresses, "top management's attention often switches to other, new challenges very quickly" which, he argues, depletes "attention in all directions and undermines the success of change" (Wimmer, 2009, cited in Müller & Liebhart, 2013, p. 8). Müller and Liebhart also assert that "positive and high energy" must be maintained throughout the implementation phase because "new patterns of behavior need to be established" (Müller & Liebhart, 2013, p. 8). Maintaining energy for change helps leaders to *enable the habit*, however, as Isern and Pung note, "the challenge is to *maintain* the momentum" (Isern & Pung, 2007, p. 5).

When change leaders do maintain momentum throughout transformational change, their efforts are more likely to be successful and sustained:

> Fifty seven percent of the executives involved in what they deemed successful transformations also said that their organizations had been "completely" or "mostly" successful at sustaining organizational energy. But only 15 percent of those involved in unsuccessful transformations did. (Isern & Pung, 2007, p. 6)

If, as Isern and Pung observed, "energy levels inevitably need revitalizing at some point in [a] transformation" (Isern & Pung, 2007, p. 5), it's important that change leaders understand the factors that positively and negatively impact on momentum. Nelson and Jansen analysed a wide range of factors in projects and determined four factors led to increases in momentum: progress; rituals and celebrations; communication; and encouragement from leaders. They also determined that slow progress or missed deadlines; resource constraints; technical problems; and ineffective project leadership decreased momentum (Nelson & Jansen, 2009, p. 146). A fascinating insight from this research for me was how self-fulfilling progress is: when a project is making good progress it gathers further speed; when it is going slowly, it loses speed.

To maintain energy and momentum in change projects, school leaders should note that maintaining momentum (or a "level of energy") is inextricably linked with the attainment of goals: "55% of projects experienced significant increases in momentum when stakeholders perceived progress toward their goal" (Nelson & Jansen, 2009, p. 146). Effective change leaders define clear, compelling short- to medium-term goals ("for the next one to two years") and celebrate the achievement of these goals (Muñiz González-Blanch, Pung, & Vinson, 2006).

Researchers have found that maintaining momentum is closely linked to other principles in my conceptual framework, including having a compelling vision, or "an inspiring view of a better long-term future", particularly when that vision is communicated effectively through timely and useful information (Muñiz González-Blanch et al., 2006, p. 6). Renewing two of the elements of readiness for change ("an assessment of urgency, and an assessment of feasibility" is also positively correlated with maintaining momentum (Dutton & Duncan, 1987, p. 281).

Principal Vikram affirmed these findings, suggesting that maintaining a compelling story is often about reiterating the 'why' behind the change as well as linking the change back to the vision and values of the school. This has the effect of renewing commitment to the values behind the change, which is an act that is particularly useful when things become difficult for practitioners:

> When you're sitting in front of 30 kids and you're pulling your hair out you got to understand the reasons as to why kids are in and out; different children are in front of you.

At Mangahuia School we saw first-hand how important it was to renew the values and beliefs that lay behind the change because the inevitable staff turnover that takes place in schools meant the early work we did to develop the vision and values framework had to be renewed continually. As we were reflecting on this, Principal Dmitri said: “I think we’ve got about five staff out of the 17 that were here with the original change.” He and I looked at each other and realised this was crucial work and needed to be prioritised.

In hindsight, one thing I would do differently with Mangahuia would be to visibly show progress through the use of “momentum maps” (Nelson & Jansen, 2009, p. 141) that outlined the goals and key milestones of the project publicly for staff. Setting up a timeline in the staffroom to help people see how far they had come and what should be next on their radar would have been a good way to both support positive momentum, as well as offering new-comers to the school a physical representation of the success of the change project.

A momentum map showing the milestones yet to be achieved would also be useful to avoid something that can negatively impact on momentum for change: what Kotter referred to as “declaring victory too soon” (Kotter, 1996, p. 12). Effective change managers, he argues, strike a balance between celebrating short-term wins and maintaining urgency: “the celebration of those wins can be lethal if urgency is lost” (Kotter, 1996, p. 132).

The visibility of an initiative can also affect the level of momentum it has. Isern and Pung argue that ensuring change remains “highly visible”:

> ...translates the grand vision of transformation into a personal reality by instilling in individuals the belief that “this time something is really different.” (Isern & Pung, 2007, p. 9)

Listing actions a company might undertake to demonstrate visible change, Isern and Pung suggested rebranding or changing a logo. While branding and logos are not high on many principals’ priority lists, the point remains: people should be reminded things are changing every time they look around. In the context of innovative learning environments change is easy to see—the new buildings are often unmistakable. More difficult to make visible, however, are the *intangible* elements of a change such as new priorities or mindsets that might be evolving.

At Ōkahukura College, one way we made these intangible changes more visible (or audible) was to replace one of our regular staff meetings once a term with a wine and cheese meeting. These sessions consisted of small groups of teachers sharing with others the changes they had made in their practice over the previous term. As well as being a way to keep staff meetings interesting, the key outcome was to ensure all staff members heard about the changes that others were implementing. As one staff member said to me once: “If you’re not making changes in your practice; you start to feel like you’re the odd one out.” What we tried to make visible was our emphasis on pedagogical innovation.

6.1.2 Engage in continuous review

Many of the principles of a successful change implementation hint at the importance of on-going review: celebration of short-term wins, for example, cannot occur without some form of review to identify what those wins are. Sirkin, Keenan, and Jackson (2005) show a strong link between ongoing review and successful change projects, demonstrating that “contrary to popular perception” longer projects that are reviewed more frequently have a greater likelihood of success than shorter projects that aren’t reviewed as often. They conclude that “the time between reviews is more critical for success than a project’s life span,” noting that “the probability that change initiatives will run into trouble rises exponentially when the time between reviews exceeds eight weeks” (Sirkin et al., 2005, p. 2).

Regular review, therefore, is essential component of successful change efforts, but the nature of the review is also important. To ensure their reviews are comprehensive, schools should seek to build their own internal evaluative capability as well as seeking feedback from those outside their organisation, using both formal and informal approaches. Table 6.1 outlines some of the different forms of review a school might seek to undertake.

Table 6.1

Forms of Review

	Internal	**External**
Informal	Teacher/team inquiry, review, reflection, informal discussions between team members.	Feedback from visiting teachers or schools; discussion at, and feedback from, conference presentations.
Formal	Focus groups, surveys; data analysis; structured observations and feedback; performance review systems.	Reviews by external (government) agencies; commissioned reviews.

6.1.2.1 *Internal review*

Informal internal review is often part of the daily life of a teacher: most educators reflect on whether a lesson achieved a particular curriculum aim or not. This type of review is important as a vehicle for both celebrating success and identifying next steps in change, and can be enhanced by employing a consistent, rigorous process. In fact, the New Zealand Curriculum considers this form of internal review to be so important that it has a section explicitly dedicated to what it calls 'Teaching as Inquiry' (New Zealand Ministry of Education, 2007, p. 35). This document encourages educators to use data when reflecting on the ways in which they are (positively and negatively) contributing to patterns of student achievement, and asks practitioners to consider which new approaches might improve those patterns of student achievement.

This kind of informal, internal review positions practitioners themselves as problem-finders and problem-solvers; asking them to seek data to clarify the cause(s) of the challenges they are facing, research and trial potential solutions, and evaluate the relative effectiveness of those solutions. ILEs provide a powerful context for this kind of action research by creating professional communities of practice to support ongoing internal review and knowledge-building. Professional learning is often seen as being most effective when is it is conducted within a community of practice, particularly when it provides teachers with opportunities to "process new understandings and challenge problematic beliefs, with a focus on analysing the impact of teaching on student learning" (Timperley et al., 2007, p. xxvii).

Innovative learning environments provide teachers with opportunities to engage in these acts by virtue of the fact that they are small communities of practice (with two or more educators teaching at once) in themselves. To support effective internal review, successful principals guide teams to use robust processes while providing time for teams to engage in those processes. Principal Dmitri was one such leader: "I remember that first term...we stopped all staff meetings. We didn't have one [full] staff meeting—the most important meeting was team meetings. We just stopped."

To support effective internal review, one of the most important roles I play in schools is to act as a critical friend or external expert who asks questions of teams to help them identify what where their successes are and in which direction their next steps should be. Principal Klaus asked me to support the internal review of teams by asking questions including "What is it that we can do better? How is it working? How do we know?"

In the formal-internal quadrant of the review structure, activities such as structured reflections and evaluations can offer insights into what is working and what isn't. Principal Dmitri used this approach when he held back from purchasing a bulk order of furniture ready for the opening of the school's new ILE spaces, asking staff to go through a formal review process of their existing furniture to ensure *teams* were the ones making decisions about what was to be purchased and why those items were needed. His goal was for teachers to analyse each of the pieces of furniture they were currently using, how they contributed to achieving the school's vision for learning and specifically which pieces of new furniture might be needed to augment what they already had.

Another successful aspect of Mangahuia School's formal-internal review framework was the establishment of student focus groups. Principal Dmitri described the process to me:

> We surveyed 40 kids across the school. We interviewed them monthly. We asked two or three questions but a main question was that "If you're stuck, what do you do?" We had 38 of 40 kids say "Well we go and ask the teacher." That's when we also realised, "Well now we could re-look at what's happening."

The students' dependence on the teacher to 'unstick' them when they experienced a challenge in their learning wasn't in line with the school's vision, and this realisation was a significant insight for Dmitri and his team. By formally analysing the student voice data, the leadership team realised the way in which the environments were being used may have been effective in many regards, but they had failed to achieve one of their most important goals: building learner agency and self-directed learning skills. The leadership team were surprised to learn their student-centred environments had led to more teacher-centred learning; an insight that wouldn't have been generated if the school hadn't regularly engaging in formal review, with student voice as the key source of data.

The importance of ensuring a mix of both formal and informal review processes with internal and external ones was identified at Pukeiti School as Principal Vikram sought to address a challenge that was causing friction in one of his teams. It became clear that one teacher was withdrawing into breakout rooms rather than working primarily in her team's collaborative space. Principal Vikram knew that while teaching wasn't suffering, the practice meant the second teacher in the partnership was left to monitor all the remaining students in the ILE while trying to run her own instructional groups. It was clear this strain on the teaching relationship would eventually lead to things breaking down.

Previously, Principal Vikram had established informal walk-throughs for each team, seeking to move away from 'staged appraisal lessons' being the main external review opportunity offered to teachers. The problem of the breakout room provided the perfect opportunity to strengthen the way internal and external review could be used to help teams identify problems, and find solutions to address them.

Over several weeks the feedback from walk-throughs to this particular team honed in on the use of breakout rooms to the point where the teaching team couldn't ignore it. In their professional learning groups, teachers from other teams began to talk about the cooperative teaching models they were using and different ways of making use of the various spaces they had available to them. Gradually the team began to use the 'courageous conversation' structure to explore and trial different ways of teaching in the general learning areas rather than in breakout rooms and, finding success, eventually adjusted their team norms to reflect this new way of doing things. Principal Vikram and I concluded that, while the team may have eventually arrive at a similar outcomes, this mix of internal and external review helped to identify and resolve the issue sooner, with less strain on the teaching relationship and learning overall.

6.1.2.2 External review

The breakout room example from Pukeiti demonstrates how powerful internal review can be when combined with external review, partly because internal review is limited by the pool of professional knowledge available within a team or organisation. External review can offer fresh eyes and fresh ideas, ultimately serving as a powerful complement to the process of internal review. To bring in external perspectives as soon as possible, Ōpapa School made the (brave) decision to open their doors to visitors in the first year of their development—to reveal their emergent practice, warts and all:

> That was important for us. It would have been easier to go, "Listen we're not ready yet, for outside schools to come and visit us," we opened our doors to everyone. "Here we are: this is what we try to do." And in hindsight

> it was a really a positive unintended consequence. And it just kept going. "Yeah this is great. Let's keep going."

There are two key benefits of this kind of external review. The first, as Principal Klaus rightfully points out, is the feedback often provides teachers with fuel for ongoing improvement: "a large portion of the visiting schools always made us feel that what was going on was very special." The second benefit is slightly less obvious: when visitors or external experts are invited to observe what collaborative teaching practices look like in ILEs, the teaching team feels a level of pressure to demonstrate those practices. As Mangahuia School found when they made their initial visits to Maungateitei and Te Rāwhiti Schools, if practice is not aligned with rhetoric, it generates cognitive dissonance and is obvious to all.

Successful schools often presented the ILE progress they were making at formal events like workshops and conferences, which proved to be useful for a number of reasons. The most important of which being that when teachers present, they naturally reflect on their practice as part of their preparation, which deepens their understanding of their own practice. It also puts their thinking through peer review during Q&A and panel discussions: when a member of the audience asks, "Why did you do it that way?" the team needs to reflect and offer an answer.

A form of external review Principal Dmitri engages in is to ask each team to present to the board of trustees once a year, asking them to summarise the progress the team has made and to outline their next steps. Dmitri sees this formal review opportunity as an important waypoint in each team's ongoing review process and he makes sure the presentations are as robust as possible; taking time to help each team prepare for their session with the board.

Formal reviews (from government agencies) also provide important feedback to strengthen the change effort. When the Education Review Office visited Ōpapa School for the first time after their transitions to ILEs, some of the feedback was blunt and challenging, but it highlighted areas Principal Klaus knew he had to address:

> I remember when [the Education Review Office] came, it was pretty brutal. But there was something in there that gave you energy to keep doing it.

As if to underline the importance of external review, Principal Dmitri confided to me one day that a challenge he had been unable to resolve was the lack of local schools with whom Mangahuia could network and use to engage in peer review: "We've got some good relationships with schools in [other areas] but nobody here," he lamented. Being part of a local community of like minds provides not only external review opportunities for schools going through change but also support, reassurance and fresh ideas.

6.1.3 Anchor change in culture

Perhaps the most powerful way a leader can ensure change is sustained is to anchor that change into the culture of their organisation. Barth defines organisational culture as:

> A complex pattern of norms, attitudes, beliefs, behaviors, values, ceremonies, traditions, and myths that are deeply ingrained in the very core of the organization (Barth, 2002, p. 7).

More prosaically organisational culture is also "the way we do things around here" (Barth, 2002, p. 7).

Organisational culture sets out patterns of meaning that wield "astonishing power in shaping what people think and how they act" (Barth, 2002, p. 7), It can provide "clarity, direction, meaning and purpose" (Alvesson, 2002, p. 152) but it can also frame "what is forbidden and what is allowed" (Müller & Liebhart, 2013, p. 2). Alvesson described culture as a "counterforce to variation and autonomy" (Alvesson, 2002, p. 153) which hints at the way it can offer unity, belonging and community; but also constraint, conformity and rigidity. Upitis (2010) makes the observation that architectural forms can reinforce culture, noting "school architecture embodies the values of education and the pedagogical approaches that resonate with those values" (p. 9). However, while *buildings* can reinforce values and culture, organisational systems must as well.

Peter Drucker is reported to have said that "culture eats strategy for breakfast" (Durbin, 2006), meaning an organisation's culture is a more powerful force in shaping behaviour than implementation or strategic plans. Schein suggested a slightly closer relationship between these two elements, asserting that rather than beating (or 'eating') strategy, "culture *determines* and *limits* strategy [emphasis added]" (Schein, 2004, p. 411). According to Schein, organisational culture often demands leaders adjust their strategy if they want to successfully implement change.

Seth Godin went one step further than Schein, arguing "Culture beats strategy—so much that culture *is* strategy [emphasis added]" (Godin, 2017). This notion of culture as strategy hints at the way leaders can make careful, deliberate changes to the culture of their organisations to ensure the approaches that are in line with a change effort become anchored into *the way people do things*.

> **Workshop transcript:** One way of thinking about culture is that it is 'the way we do things around here.' It's the way we operate with each other, our natural approaches to solving problems or getting things done. There's a really good saying that a fish would be the last thing in the world to discover water because it is completely surrounded by it. The fish is so totally immersed that it can't see what's right in front of it. Organisational culture is the water we're surrounded by: we're completely immersed in it and sometimes it's not even obvious to us. It often takes a new team member or a fresh pair of eyes to reflect back to us what our culture is. And in that lies a big challenge: if we're not aware of what our culture is, how can we change it to be supportive of our change effort?"

This is well-worn ground for me—I've delivered variations on this monologue dozens of times. As well as the fish analogy, an adage I often fall back on is: 'If you don't control the culture, the culture will control you." It trips off the tongue, but if I'm honest, when I began having these discussions, I didn't really understand the specific levers available to school leaders that allow them to 'control' their culture. In the past I'd been in teams and schools that I felt had good organisational cultures, but if I were to analyse what contributed to them, I would find it difficult to generalise a set of common features, beyond observing that skilled leaders often employed storytelling and rituals as part of their culture-building. As Kotter said, culture's "near invisibility makes it hard to address directly" (Kotter, 1996, p. 148).

Deal and Kennedy argued that culture is built on a set of "interlocking cultural elements":

> History yields values. Values create focus and shared behavior. Heroic figures exemplify core values and beliefs. Rituals and ceremony dramatize values and summon the collective spirit. Stories broadcast heroic exploits, reinforce core values, and provide delightful material for company events (Deal & Kennedy, 2000, p. 3)

When I discovered these five elements (history, values, heroes, rituals and stories) I at last felt I had a framework with which I could not just understand culture, but also the mechanisms by which it might be adjusted and maintained. These five elements became the specific set of levers I'd been looking for.

History (which Deal and Kennedy defined as a 'shared narrative of the past) "lays the foundation for [organisational] culture" (Deal & Kennedy, 2000, p. 4). The power of history to "keep people anchored to the core values that the organization was built on"

(Deal & Kennedy, 2000, p. 4) was illustrated to me at the opening of a significant new building at a high school with which I'd worked. The community had gathered in a marquee on a beautiful summer day, to be part of the official opening ceremony. Flowers lined the edge of a temporary stage upon which the assembled dignitaries sat, when one of the senior leadership team stood and walked to the microphone. He greeted the audience in Te Reo Māori[8], then made a powerful speech linking the new building (and the new opportunities for teaching it represented) with the bold step the school undertook several decades earlier to establish a bi-lingual unit and wharenui[9]. With eloquence and a poetic turn of phrase he drew a line from the new learning environments back to that key historical moment, re-affirming the culture of the organisation as being bold, future-oriented and innovative. It was a great moment of culture-building and one that was not lost on the people who had endured strong criticism at times as the project progressed.

The speech also exemplified Deal and Kennedy's second interlocking element of culture: values and beliefs. These, they argue, are shared understandings about what is really important: what matters are to be attended to most assiduously; what information is taken most seriously for decision-making purposes, and ultimately what the organisation stands for (Deal & Kennedy, 1982, p. 31). At Ōkahukura College we realised we had a powerful tool to shape culture when our graphic design student revealed the designs she had developed for our values posters. She had done a wonderful job of capturing visually the values concepts we worked so hard to describe verbally. We knew they couldn't just go up on the walls. If they were to shape culture the way we wanted them to, we had to put them on our digital signage system (broadcast on screens in reception, throughout the school as far as the gymnasium); we had to weave them through our Powerpoint presentations and print publications; we even set them as screensaver images on the hundreds of desktop computers throughout the campus: they were inescapable. Our goal was to ensure students, staff, parents and visitors were surrounded by our values; to ensure 'excellence in all that we do' and 'warm, mutually respectful relationships' called out to them as they walked down corridors, ate their lunch and waited for buses. We wanted these messages to surround people like the proverbial water surrounds the fish.

Whangariri College showed me the power that rituals and ceremonies can hold to

8 The Māori language.

9 A traditional meeting house of Māori.

embed collaboration into culture. The school was in the process of implementing ILEs and collaborative teaching, and they had invited me to help them on their way. Having completed a professional learning session with staff, we headed to the staffroom for morning tea. One of the team was having a birthday so we all sang “Kia huritau ki a koe” (‘Happy birthday to you’ in Māori) before enjoying some birthday cake, the importance of family, personal appreciation and Te Reo Māori reaffirmed for all.

Then a very unusual thing happened: a number of the chairs in the staffroom were moved into a horseshoe shape around one of the younger teachers who was holding a newspaper. She motioned me over and patted the seat next to her, “Are you going to do the quiz? We do it every day.” “Sure!” I replied, not quite sure what was happening. Slowly everyone turned their attention to ‘The Quizmistress’ who began: “Question One. What do the following three people have in common...?” She proceeded to read out each of the 10 questions from the day’s newspaper quiz, and the assembled team worked together, argued with each other and eventually arrived at an answer they were all happy with. Each of the 10 questions were answered and, when we were done, the answers were tallied. “10 out of 10 again!” the Quizmistress announced, “Well done team!”

As the quiz ended, people stood to go about their business: checking pigeonholes; congratulating each other; gently ribbing friends about incorrect answers; gradually drifting back to class. I sat there and reflected on what I had just seen: the ritual of a diverse group of people coming together to achieve something that any one of them could not have achieved on their own—getting 10 out of 10 questions correct in the daily quiz. The message about this team’s culture was unmistakable: we achieve more as a team than we do on our own.

Later, team members shared with me other rituals they performed to ensure their collaborative teams worked well: for one group, their team norms dictated that one of their two meetings per week would focus on planning, while the second would focus solely on the pastoral needs of students. It was a ritual to which they held rain or shine. Other rituals revolved around how they checked in with each other: their meeting minutes always had a space at the top for them to paste in an emoji of how they were feeling at the start of the meeting. From ‘I got this!’ to ‘Is it time for a drink yet?’

Whangariri College also showed me the power of stories as an embedding mechanism for culture. One of the first stories I came across when working at the school was about

Dignan, an experienced teacher who was part of the first collaborative learning team established in the school. Dignan had since moved on from the school, but his story was still retold by staff; lifted up and celebrated. Dignan knew how important it was to maintain good relationships in collaborative teaching and it was he who started the tradition where, no matter how good or bad the day was, no matter how many personal or professional challenges the team had faced, the final thing they did as they left at the end of the day was to fistbump each other, saying "Great job today; see you tomorrow." Retelling the story of Dignan to those who hadn't heard it before gave an example of a person who exemplified the organisational values; while "capturing dramatically the exploits of employees who personify these values in action" (Deal & Kennedy, 2000, p. 3).

At Whangariri College, Dignan fitted into the category of a 'heroic figure', or a person "whose status is elevated because they embody organizational values". It is these heroes, Deal and Kennedy argued, who "serve as role models [and whose] words and actions signal the ideal to aspire to" (Deal & Kennedy, 2000, p. 8). In a school I once worked in, one of the heroic figures was Kovacs. He was a bristly—at times grumpy—'old school' teacher. He had great curriculum knowledge, but frankly the interview panel considering his appointment weren't sure if his personality was the right fit for our school. Our initial impressions proved to be correct, particularly when the pressure was on: we'd worked hard to develop a vision for learning that seemed opposed to what Kovacs was used to—with student voice, engagement and choice at the heart of learning. No matter how the furniture was arranged when Kovacs walked into a classroom, he would begin each lesson by having students form a lecture-style arrangement, then attempt to deliver content-based lectures to increasingly disengaged students. When a student reached their threshold for boredom and began to distract others, Kovacs would explode: going red in the face, shouting and sending increasing numbers of students from the room. It became a growing source of frustration for the senior leadership team who had to accommodate these ejected students in their office, find learning activities for them to continue with, then arrange a restorative conversation to try to integrate them back into Kovacs's class.

We'd been working with Kovacs for some time to try to get him to change his practice—with mixed success—when one day the principal came into our office and asked us to follow her. As we approached a classroom, she said, "Have a look at this."

Knowing we were about to see Kovacs teaching a class, I wondered to myself "What's he doing now?", fearing the worst. But, there in the middle of the classroom, was a group of students huddled tightly around Kovacs, who was crouched at their level and drawing with a marker on a whiteboard table. This wasn't a lecture from 'professor' to student; it was a rich conversation between equals. The students were gathered together, listening intently to Kovacs telling a story, punctuating his narrative with questions and jokes, linked to what the students were learning. Behind the inside circle was a larger group of students standing, straining so they could be part of the activity too. We watched for a while, admiring the shift in pedagogy and resulting increase in student engagement.

Later, when talking with Kovacs, we asked if he could share what he was doing so others could learn from it. At a subsequent staff meeting, Kovacs talked frankly and personally about the (sometime difficult) shifts he'd had to make, why he'd made them and what the benefits were. Most of all, Kovacs spoke about how those shifts had changed his relationships with his students and reminded him why he did the job in the first place. From that staff meeting onwards, Kovacs became a heroic figure in the school's story of change. If a self-confessed 'old school' teacher could manage to make necessary shifts, then so could anyone. Even after he moved on from the school, the story of Kovacs's shift in practice continued to serve as an inspiration to those who followed.

Another way of think about these five interlocking elements of culture is to see them as what May calls a "pattern language for the development of culture" (2001, p. 1). He argues that a key step in developing culture is the act of "expressing it in the artifacts of that organisation" (May, 2001, p. 2), proposing a framework of three categories of artefacts.

1. Physical artifacts: physical objects and environments (e.g. pieces of artwork, furniture, rooms, meeting places, equipment).
2. Information artifacts: primarily informational or computational (e.g. documents, procedures, policies, computer applications). Procedure, planning templates.
3. Conceptual artifacts: objects that we use in our mental or conceptual space (e.g. metaphors, stories, patterns, etc.) (May, 2001, p. 2)

We can see these three categories at work in the essential acts of leadership outlined earlier: Ōkahukura's values posters were, in fact, examples of physical artefacts; Ōpapa's co-teaching planning templates were information artefacts; while Klaus's notion of 'building fitness' acted as a conceptual artefact that expressed important elements of Ōpapa's culture of smart risk-taking, perseverance and resilience. In my experience, leaders who are most successful at embedding change are those understand this 'pattern language' and use all three categories of it to ensure *culture is strategy*.

6.2 Extend

John Kotter uses an effective conceptual artefact to signal to change leaders the importance of the 'sustain' phase of a change implementation. He describes a room where every object is connected to every other object through "a series of ropes, big rubber bands, and steel cables." A simple act like moving a chair becomes difficult:

> Straining harder, you do move the chair a few inches, but then you notice that a dozen books have been pulled off the bookshelf and that the sofa has also moved slightly in a direction you don't like. (Kotter, 1996, p. 135)

The point he makes is that changing one element in a system but not the other elements of the system that interact with the original element is likely to lead to reversion. Without extending change into the *systems* of an organisation, changes in practice are likely to be short-lived.

6.2.1 Adjust reinforcement systems

Reinforcement systems are the "surrounding structures, systems, processes and incentives" that organisations use to shape employee behaviour (Aiken & Keller, 2009, p. 2), and as Muniz et al. noted, successful change initiatives integrate the goals of a transformation into these organisational systems, particularly those related to "budgeting, performance management, and recruiting" (Muñiz González-Blanch et al., 2006, p. 6).

When these systems are adjusted to be "in tune with the new behavior" they can help cement change into the daily life of an organisation (Aiken & Keller, 2009, p. 2), avoiding the "regression" to which Kotter and others referred. When leaders don't adjust reinforcement systems "employees are less likely to adopt [new behaviours] consistently" (Lawson & Price, 2003, p. 33).

6.2.1.1 Recruitment systems

Edgar Schein argued that one of the most powerful mechanisms a leader has available to them to embed values into culture is what they "systematically pay attention" to. This includes what they notice and comment on; and what they measure, control, and reward (Schein, 2004, p. 246). Among these key activities, Schein argued, are the acts of recruiting, selecting, promoting, and excommunicating. While 'excommunicating' staff is problematic in education (see Chapter 5, Remove barriers to change), the hiring and induction of staff is one of the key "primary embedding mechanisms" leaders have available to them when embedding change into a culture (Schein, 2004, p. 247). Kotter warned, for example, that if the next generation of leadership doesn't personify a change, the new approach will not last. A poor employment decision, as Kotter said, "can undermine a decade of hard work" (1996, p. 14).

Several years ago a school with which I was working, and which had made great progress around co-teaching and collaboration, had developed a set of norms that centred around what it was to be an effective team member. They had done just about everything right, including developing clear expectations of collaborative team members; established widely held team norms; and engaged in robust review and evaluation. Many months into the school's ILE journey, the principal offhandedly mentioned to me that the school was recruiting a new team member. I paused for a moment and wondered, "What kind would a job advertisement look like if it reflected all of the progress they had made in collaborative practice over the last year or two?"

I asked the principal what kinds of skills he'd asked for in the advertisement, and he started to say "Well, it's just our standard job ad..." before trailing off. We made eye contact and both came to the same unspoken realisation together: if the wording of the job advertisement hadn't been updated recently, it's possible that the school had been attracting new staff who had the skills needed some years ago, not necessarily the skills they needed now. We looked up the advertisement in the *Education Gazette* and scanned the copy: while being a good team player and curriculum knowledge were mentioned, nowhere did the advertisement include co-teaching, collaborative planning, shared problem-solving, working with others' strengths, or any of the other skills the school had determined to be essential to the operation of successful ILEs.

Tracey, a friend who also works as a consultant in schools implementing ILEs, mentioned to me one day an example of how schools might go about recruiting staff differently. In this particular school the start of a job interview is like any other: welcome and introductions, looking over the applicant's curriculum vitae, and a few introductory questions and answers. But after 20 minutes, things take quite a different turn: the principal stops the interview and physically walks with the applicant over to the new learning environment, to continue the conversation there. The principal then asks questions like “If you were teaching a class in here, how would you do it?” and together the principal and the applicant talk through possible approaches.

This approach achieves two key objectives: firstly, from very early in the appointment process, any prospective staff member has a clear understanding of what is in front of them, including the environments within which they will be teaching; secondly, the conversation between the principal and applicant establishes a culture of collaboration and shared problem-solving from day one. The applicant already has an appreciation of the school’s culture should they choose to work there: in this respect the applicant’s induction begins not when they arrive, but during their interview.

6.2.1.2 Induction systems

Traditional approaches to induction begin the first day a new staff member arrives at a school, often overloading them with mountains of administrative information about who, what, where, and how things are to be done. Ōpapa School realised their induction processes needed to change in order to take account of the ways in which teaching had evolved as a result of their innovative learning environments.

Principal Klaus recounted to me the elements of their recruitment and induction process that had changed, noting the goal of the whole process was to make new staff feel they were part of the school team before their first day. He described how (as Tracey’s example illustrates) induction had become inseparable from the appointment process. Klaus now has team members meet applicants during interviews, walking them through teaching spaces and getting to know each other. The interview has become a way to help the applicant get as rich a feel of the environment as possible.

After the interview, Klaus invites teachers to come into the school ahead of their start date to begin working with their new team and to begin to get used to their new learning environment. One key difference from previous practice is that the school now pays for this to occur:

> We’ll pay you if you’re coming from another school [Principal Klaus would tell new staff], or if you’re not, we’ll still pay you to come into our space and spend some time here with Margot and myself.

This budget adjustment is another reinforcement system that Klaus has used to ensure the sustainability of the school's changed approach to teaching. It also shows an understanding of the importance of making sure, as Klaus puts it "when people come into this space they are feeling as up to speed as possible."

Another change to the way induction happens at Ōpapa is less time is now spent on administrative procedures given new staff work in ILEs and they now have access to colleagues who can support them with these technical details.

6.2.1.3 Decision-making systems

The way Vikram and the Pukeiti leadership team communicated and made decisions with team members throughout their ILE implementation changed as well. They adjusted group norms including developing protocols such as, "No two way conversations in a three way space." This arose because Vikram and the team noted that when two team members discussed something in the absence of a third they (often inadvertently) put that team member on the back foot, sometimes making them feel that they were being railroaded into a decision, or were being consulted after the 'two against one' had already made up their minds about something. The new group norm meant that when two people realised they were heading towards making a decision requiring the involvement of a third team member, they would 'park' the discussion and pick it up when all three were in the room, and in a position to give the discussion the space it deserved.

I spent a lot of time working with Pukeiti School on the different modes of co-teaching and enjoyed watching the way these were worked into reinforcement systems, particularly their planning templates. As teaching team considered the goals they had for a particular lesson, they used the planner to work out whether 'one teach, one drift'; 'one teach, one support', or another mode of co-teaching such as 'station' teaching might be the best ways to achieve the outcomes. Once these decisions were documented in the planning, they became part of the reflection and evaluation process at the end of the sequence, further enhancing decision-making capability.

6.2.1.4 Performance management systems

> In large part, culture is a product of compensation. (Alec Haverstick cited in Watkins, 2013, p. 3)

One of the most powerful reinforcement systems in schools has traditionally been performance appraisal linked to professional standards. For New Zealand primary school teachers there is a strong financial incentive for them to demonstrate they have met these standards because annual assessments against the standards are required for teachers to progress through the salary scale, as outlined in the NZEI collective agreement (New Zealand Ministry of Education, 2016, p. 15). As Lawson and Price noted:

> If managers are urged to spend more time coaching junior staff, for instance, but coaching doesn't figure in the performance scorecards of managers, they are not likely to bother. (Lawson & Price, 2003, p. 33)

While this 'assessment against the standard' approach retains some of the DNA of the traditional 'inspectorate' by which individual teachers were held accountable through high-stakes observations, the standards have evolved over time to include elements beyond just a single teacher's technical competence in teaching. The current set of standards (known as 'Our Code; Our Standards') is a vital reinforcement system that holds significant sway over what teachers pay attention to, and what school leaders measure (Education Council of New Zealand, 2017). The worst case scenario in an increasingly collaborative profession is that the tools used to measure, appraise, give feedback and approve steps on the salary scale for teachers are those that prioritise individual and isolated acts of teaching.

The standards currently in place ask teachers to collaborate with colleagues and others in the profession by:

- engaging in professional, respectful and collaborative relationships with colleagues;
- demonstrating a high standard of professional behaviour and integrity;
- contributing to a professional culture that supports and upholds this Code. (Education Council of New Zealand, 2017, p. 10)

Thankfully, these elements form a key reinforcement system that aligns with the principles of innovative learning environments. Without them, teachers would be caught between what is espoused as being important in their schools and the metrics by which they are actually evaluated.

Taking a 'systems thinking' approach to these reinforcement systems helps leaders to ensure the changes in practice associated with the implementation of innovative learning environments are not undermined by conflicting expectations present elsewhere in the organisation.

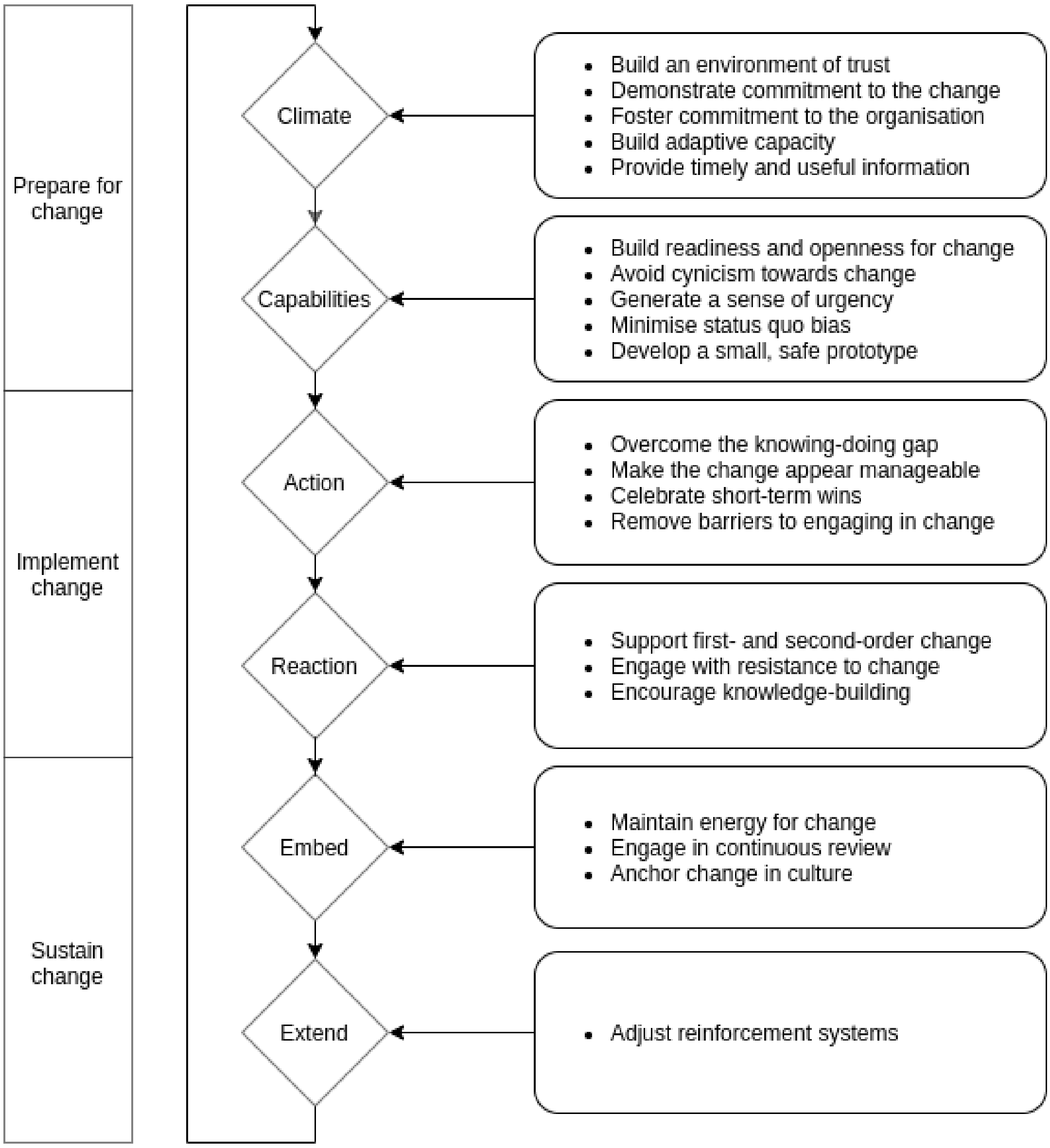

Figure 6.1: Conceptual framework (sustaining change)

When change is embedded and extended throughout an organisation, the likelihood of it enduring beyond a single principal or leadership team is increased. The completed conceptual framework acts as a wayfinding and planning tool for leaders seeking to implement innovative learning environments. What I set out to uncover were the hidden mechanisms that were at play in what appeared to be (on the surface) a chaotic, messy process. From my dual roles as practitioner and researcher it is heartening to see the conceptual framework as outlined in Figure 6.1, not because it makes the change process easier (I don't think transformational change will never be 'easy'), but because it makes it more *understandable*.

7 Chapter 7: Conclusion and implications

Did our protagonist complete his quest? Did he secure his objective and bring the story to a satisfying conclusion? In order to answer these questions, I'm going to have to slip back into English teacher mode and do something that has infuriated students for generations. I'm going to answer these questions by saying "Yes...and no."

As to whether insights were gained; as to whether I (and you) now have a better understanding of leadership practices that are most likely to lead to the successful implementation of innovative learning environments, the answer is yes. I now have a much deeper understanding not only of the change leadership principles that *should* work in these contexts, but also a deeper understanding of which principles *do* work. The conceptual framework upon which this research is based has continued its "spiraling refinement, elaboration, extension, and revision" (Anderson, 2006, p. 388), but it has also reached a level of maturity, having been tested and triangulated against my experiences in schools; as well as the experiences of co-participants and key informants. The framework has reached the point where it stands on its own and should be used by those transitioning into innovative learning environments.

Through this research it has become increasingly clear that when a change is values-based, inclusive, incremental, participatory and distributed it is more likely to be successful than those which are not. I have found that when people believe a change is both urgent and achievable, when it occurs within a culture of trust, commitment and self-efficacy, it is more likely to be successful. When prototypes are used to remove uncertainty and to build confidence; when participants are supported to take simple first steps and see the benefits of those first steps, then change is more likely to be successful. When people are supported to make sense of what is happening around them, when resistance is minimised where possible, but also seen as a force that can strengthen the change effort, then that change is more likely to be successful. When change is embedded into organisational culture and extended into reinforcement systems, change is less likely to regress, and more likely to be sustained over time.

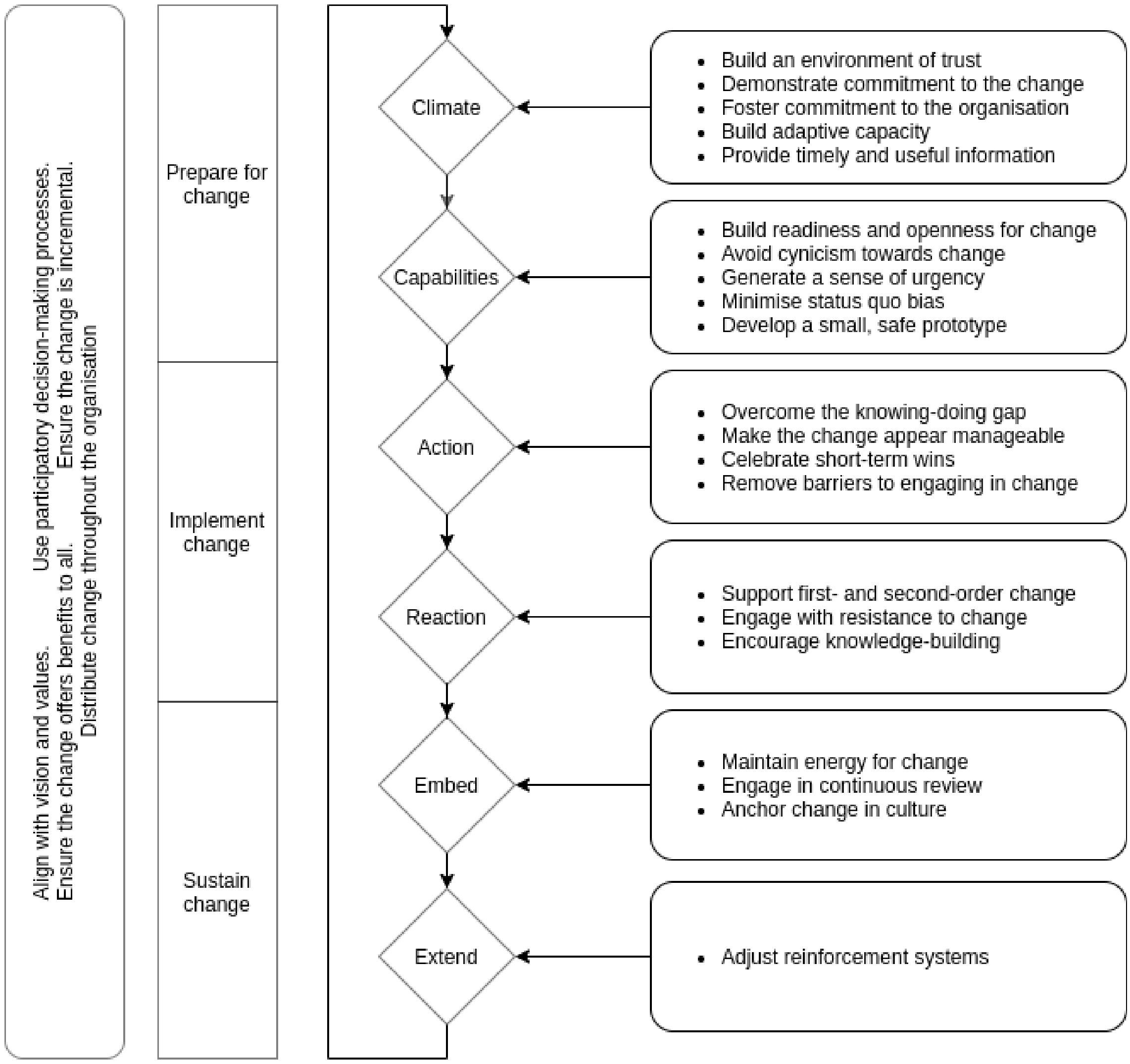

Figure 7.1: Conceptual framework (complete)

As to whether I have arrived at a definitive, fixed approach to leading change that applies for all schools implementing innovative learning environments, in all communities, the answer is probably no. The more I have worked in different schools, the more I believe that change is incredibly context-dependent and influenced by the unique characteristics of the human beings taking part in it. While an understanding of the change process, as summarised by the completed conceptual framework (Figure 7.1) is essential, the true skill of a great change leader is their ability to take the principles within the framework and apply them with intelligence and nuance according to the situation in front of them. They need to know when to push someone; when to 'hold their feet to the fire' and when to back off. They need to know who should lead the prototype and who should observe it; who their innovators are and who their first followers should be. This situational awareness is at the heart of great leadership, and I've been lucky enough to work with some incredible school leaders who understand this and use this awareness every day. Having said that, these guiding principles, in the hands of a skilled leader, should prove to be powerful tools to shape and guide that situational awareness. Knowing what to emphasise, how to emphasise it and when to do so is invaluable knowledge.

One thing I have learnt throughout this research is that one of the key tools a school leader has available to them is the environment itself. While innovative learning environments can present challenges to those seeking to implement them, they can also provide the tools to overcome those same challenges. ILEs give previously isolated teachers access to the expertise, the collaborative problem-solving, the emotional and technical support, and the fresh ideas they require to be successful. In this respect innovative learning environments can be seen not simply as a tool for teachers but as an amplifier: they amplify the challenges and the rate of change, but they also amplify what's possible and what people are collectively capable of.

7.1 Implications for further research

While this research provides a set of principles school leaders should employ when implementing innovative learning environments, it also gives rise to new questions which are worthy of further research. While principles outlined in the conceptual framework have been tested in the context of implementing ILEs, further study is required to see if these same principles apply to different examples of transformational change such as significant curriculum redevelopments; large-scale school expansions or extensions; and organisational restructuring or reinvention.

Further research is also required to deepen our understanding of the personal attributes of successful change leaders (or particularly successful teachers). What are the defining features of their interpersonal style, and are these features innate to the individual or can they be taught to others? It's often the interpersonal skill of a leader that makes them effective: these personal attributes might include (but not be limited to) approaches to communication, decision-making styles, their ability to engage in sense-giving with staff, or their ability to understand the emotional needs of others as well as themselves.

Another factor that is hinted at in the findings and which is deserving of further research is the socio-emotional climate of the workplace while change is occurring. While I have confirmed that organisational *culture* is an important tool by which leaders can embed change into an organisation, the *climate* of the organisation may prove to be equally important in determining the success of a change initiative. Organisational climate may influence short-term decision-making and behaviour more than culture, making it an important variable. If an organisation or team's climate is not conducive to behaviours such as smart risk-taking; the embracing of innovation or effective problem-solving; any form of change is going to be difficult to sustain.

While my research has focused on individual schools' abilities to implement change, these schools all exist within a 'macro' policy environment that may activate or suppress the desire of organisations and individuals to innovate and to find more successful approaches to achieve their goals. An important focus for further research should be the policy settings that best support innovation and continual improvement in schools.

And so, where to next for me? Having returned to the shire after my epic journey, where do I turn? Some things will be the same. My work supporting schools will continue: tomorrow will be another day; I'll pass through another airport, on my way to another school meeting room. But some things will be different. As long as I continue to do this work I don't think a day will go by where I won't think about what I've learnt in my research. I also don't think a day will go by without me appreciating the dedicated, insightful school leaders I'm privileged to work alongside.

When I first began working in innovative learning environments, I could count on the fingers of one hand the number of schools in New Zealand who could describe themselves as being 'innovative learning environment schools.' Now, more than a decade later, there are literally hundreds of such schools across New Zealand. Our collective understanding, not only of the potential these environments hold for improved teaching and learning is considerably enhanced, but so, too, is our understanding of the best strategies leaders should employ when transitioning their schools to these environments.

I'm thankful that I've been able to play a small part in these advances, both through my research, and through my ongoing work with schools.

Here must end the story.

—Shakespeare, *The Comedy of Errors*

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Appendix A: Literature Review Search Process

To establish where there was an initial research gap, the following combinations of keywords were entered into a range of different databases. Each primary search term was combined with each of the secondary search terms, to cover the most essential permutations. For example “innovative learning environments” was combined with “change leadership”, “leading change”, “change management” and so on before “innovative learning environments” was combined with “change leadership”, “leading change” and so on.

Advanced searches were also performed by combining the primary search terms (as keywords) with Subject Terms including “change leadership in education”, “educational leadership”, “change leadership”, “leading change”

Search parameters:

- Keyword and subject term search
- All dates
- All keywords
- Any keywords
- All collections (physical volumes, databases, Minerva and coursework)

Databases:

EBSCO, ERIC, University of Melbourne library catalogue.

Primary search term:	**Secondary search term:**
“innovative learning environment”	“change leadership”
“innovative learning environments”	“leading change”
“ILE”	“change management”
“modern learning environment”	“manage change”
“modern learning environments”	“managing change”
“MLE”	“implement change”
“next generation learning space”	“implementing change”
“next generation learning spaces”	“implement”
“NGLS”	“implementing”
“flexible learning space”	“transition”
“flexible learning spaces”	“transitions”
“flexible learning environment”	“transitioning”
“flexible learning environments”	“supporting”