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3. WHAT WORKS

Changing Practice When Spaces Change

CONTEXT

In 2010 and 2011 Christchurch, New Zealand suffered a series of catastrophic earthquakes that left tens of thousands of city, buildings damaged and hundreds of people dead. Many public buildings across the city, including schools, were damaged beyond repair and the programme to rebuild them has resulted in one of the largest school network renewal projects the world has ever seen. The New Zealand government has invested more than NZ\$1.1 billion to rebuild and renew 115 schools (New Zealand Ministry of Education, 2014a, p. 1). An explicit goal of the New Zealand Ministry of Education through this process was to make what they call "modern learning environments ... common throughout greater Christchurch" (2014a, p. 2).

The New Zealand Ministry of Education (2012) also set out a number of other objectives for the programme, namely, to "improve the delivery of education, extend the options available for learners, and lift student achievement", "support the establishment of modern learning environments designed to meet the needs of the whole community", build "fewer schools offering a wider range of educational options and specialised training that give greater Christchurch a distinctive advantage", offer "single site provision of early childhood education (ECE) through to tertiary education, alongside a range of other services", and share facilities "to extend the learning opportunities available to a wider group of learners" (p. 2).

The New Zealand Ministry of Education made it clear that the rebuild was an opportunity to rejuvenate buildings and pedagogy to better serve student learning:

The majority of school buildings were built between 1950 and the 70s. Since then, teaching practice and student learning needs have changed significantly. New technologies and building materials allow for new, vibrant and well-connected learning spaces. All students deserve to be taught in these new modern learning environments, and benefit from new teaching methods. (2014b, p. 1)

The programme for the rebuild is set to progress until 2023, and includes three distinct categories of build that reflect the scale of the work being undertaken; (1) restore – repair of earthquake damage, remediation of weather-tightness and

building resilience issues; (2) consolidate – rationalisation, mergers, closures and co-location, and (3) rejuvenate – consideration of future educational provision for the most significantly affected schools, in terms of damage to facilities and sites, and movement of people (New Zealand Ministry of Education, 2012, pp. 8–9).

One can see from the scope and complexity of these priorities that the rebuild programme is ambitious and multi-faceted. Achieving goals such as the improvement of student achievement, raising community participation in education, co-locating and vertically aligning education providers, and making improvements to access and inclusion will present significant challenges.

As school leaders guide their staff, students and communities through this process, their abilities to lead change will be tested. They will need to draw from research into effective change leadership and apply what they learn to their own work, rebuilding not only the physical environment, but also cultural, emotional and social environments as part of the process of reimagining what school might be. Staff, students, parents and communities will be challenged by the process of moving from pedagogies and practices that have been shaped and guided by industrial-era classrooms to pedagogies and practices that can make the most of open, flexible, and collaborative teaching and learning spaces.

A number of people and organisations are working in Christchurch to support schools through the change. The writer's role as a consultant for a not-for-profit organisation was to do exactly this. The role entails helping schools develop and articulate a vision for learning, and to design and develop not only the buildings, but also the human capabilities, dispositions and support structures required to ensure this vision is achieved. This means drawing on experiences in a wide range of schools as they redevelop their built environments and their approaches to teaching and learning.

OBJECTIVE

While there is a body of change leadership literature that can help us to understand change and offer some general guidance on how to navigate it successfully, what is missing is specific advice on changes related to physical learning environments. The size of the financial investment in New Zealand and the opportunities to raise outcomes for learners means that it is particularly important to get this right, despite some researchers estimating that "only 30% of change programs are successful" (Aiken & Keller, 2009, p. 1).

With many of the 115 Canterbury schools facing significant change as their physical environments are remodelled and rebuilt, it is important to evaluate the change leadership strategies that are most effective when it comes to shifting teacher practice once physical spaces change. The essential question is: "What can leaders do to increase the likelihood that 19th century pedagogy is not imported into 21st century spaces?"

The challenges for those leading schools through this change are significant: i.e. setting out a compelling vision which can generate energy and act as a touchstone for new practices; building staff capacity in new approaches such as coteaching, engaging with community to help them understand the changes taking place; and supporting staff as old strategies are replaced.

Schools may benefit from a deeper understanding of change leadership as it applies to Modern Learning Environments. (1) School leaders may find it easier to implement change, and the chances that their change will be successful will most likely increase; (2) teachers may find not only that their voices are listened to in the process, but that they are also given more ownership and control of the change process; and, (3) all parties may find that the change is more of a positive experience, less stressful and less emotionally taxing.

Current research suggests there are a number of things that school leaders can do in order to maximise the likelihood that change is positive and that it achieves the intended outcomes. Some are discussed below.

Understand the Nature of the Change

For many teachers, students, parents and school leaders, the move to open, flexible, collaborative learning environments represents a significant departure from "business as usual". Rather than being an incremental adjustment to schooling, this is a total transformation that challenges almost every aspect of the system, from identity and the roles that individuals play, through to the metrics used to measure success.

Many scholars including Heifetz and Laurie (1997) and Waters, Marzano, and McNulty (2003), refer to two different types of change as people commonly experience it. (1) *Technical* (or incremental) change refers to change that is an extension of the past, which sits within existing paradigms, is consistent with prevailing values and norms, and can be implemented with existing knowledge and skills. (2) *Adaptive* (or transformative) change represents a break from the past, sits outside existing paradigms, conflicts with prevailing values and norms, and requires new knowledge and skills to implement (Waters et al., 2003). For many teachers steeped in the "single cell" tradition, a move to modern learning environments represents adaptive change.

Given that different support structures are required depending on whether the change is technical or adaptive (Waters et al., 2003) and that the same change can be experienced by different people within an organisation as being both technical *and* adaptive, it is important to ask what kinds of support systems lead to the successful implementation of change? An added complication is that change often leads to people feeling personally threatened because the skills and strengths for which they have been valued and respected in the old order may not be as important or valued in the new order (Heifetz, Grashow, & Linsky, 2009). This acknowledgement is

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crucial for leading change because people who are feeling threatened or unsafe are less likely to fully engage the rational, logical part of their brain. So while the change might sound perfectly reasonable, rational and common sense, this doesn't guarantee that people will fully engage with it if they are feeling personally threatened.

Build 'Change Readiness'

Armenakis, Harris, and Mossholder (1993) suggest that resistance to change is most likely to be minimised when employees are 'ready' for the change. They describe two conditions required for this to occur. The first is the communication of a clear message of discrepancy between the status quo and the desired end change state, which can be labelled *cognitive dissonance* or what Kotter (1996) describes as the creation of "a sense of urgency" (p. 35). The second condition is the development among those engaged in the change of the understanding that they have the necessary knowledge, skills and abilities to cope with the change. In short, there should be an understanding of the need to change and a belief that those involved are collectively capable of undertaking this change (Armenakis et al., 1993).

Another contributing factor to a person's level of change readiness is the level of their commitment to the organisation. McKay, Kuntz, and Näswall (2013) have shown that individuals who are personally aligned with the values and goals of an organisation are more likely to commit to change that is intended to advance those values and achieve those goals.

Adopt a Leadership Style That Is Appropriate to the Context

It seems that 'change readiness' and affective commitment to the organisation can lead to an increased likelihood that teacher behaviour will change, but there are other leadership practices that can contribute to the success or failure of a change initiative. Connor (as cited in Bowman, 2000) suggests that *continuous* and *integrated* leadership are the only styles that can cope with adaptive change, and that leaders often need to manoeuvre through a menu of change leadership styles to manage what he describes as 'torrential' change. *Integrated* leadership is described as "balance[ing] concern for both the human and technical aspects of change" while the goal of *continuous* leadership "is to generate a sustainable adaptation capacity to ensure that the change leadership initiative at hand does not consume all of the organization's assimilation resources" (Bowman, 2000, p. 447).

Engage in Participatory Planning and Problem-Solving

Furthermore, research suggests not only that inclusive, participatory knowledge-creation is desirable, but that it should begin as early as possible in any adaptive change process. Miller and Monge (as cited in Holt, Armenakis, Field, & Harris, 2007) suggest "those who participate in planning and implementing change often

have the opportunity to influence the change [...and] tend to become affectively committed to the change effort and support the change overtly" (p. 245), and that establishing these participatory, generative, problem-solving processes early on will increase the likelihood that change will be successful.

Engage in Sense-Giving, and Promote Useful Sense-Making

Research also suggests that crucial to the successful implementation of adaptive change is the timely and adequate provision of information regarding the change throughout the process. Levels of change-related anxiety tend to reduce when employees receive useful and timely information (Miller, Johnson, & Grau, 1994). Participants' interpretation of this timely and adequate information is also an important factor, and when such information is received, employees tend to evaluate change more positively and exhibit greater willingness to cooperate (Wanberg & Banas, 2000).

Avoid Change That Is Perceived as Being of 'Low Cultural Fit'

Another factor that is positively correlated with successful change implementations is the level of *cultural fit*, or "the compatibility between a new practice and the existing organizational culture" (Canato, Ravasi, & Phillips, 2013, p. 1724). If introducing changes to practice such as moving teacher allocations from 1:25 to 3:75 or abandoning individual teacher planning in favour of team planning is incompatible with the prevailing norms and practices of an organisation, research suggests that the change is likely to be "fragile and subject to regression" (Kotter, 1996, p. 102).

What happens in cases when teachers, through the rebuild of their school, are forced to implement strategies and practices that are a low cultural fit with prevailing beliefs and values? If, for example, a school has a long tradition of autonomous teachers operating in their own "single cell" classrooms, making unilateral choices about the right learning activities for a given group of students, and that same school is rebuilt using open, collaborative, flexible learning environments, what happens? Are the new "low cultural fit" practices adopted or abandoned? Or are they adapted, as Canato et al. (2013) found was the case? Or can new practices be re-positioned by leaders so that the appearance of them being of *low cultural fit* is avoided?

METHODOLOGICAL CONSIDERATIONS:

Any number of methodologies might prove helpful when exploring the area of change leadership and flexible learning spaces. They include: (a) semi-structured interviews and/or questionnaires with leaders and staff to try to determine which strategies best support people through adaptive change; (b) discourse analysis

from within schools undertaking adaptive change to look at processes such as sense-giving and sense-making, and/or (c) support offered to staff experiencing change. The use of case studies that compare the approaches of different schools to Kotter's (1996) change leadership framework and determine the degree to which fidelity to this model is an indicator of success could be employed.

However, one area in particular that might prove to be more useful for the writer than others given his role in the process of changing physical spaces is the field of auto-ethnography. Because the writer is supporting schools through the change process, objectivity will be difficult.

Auto-ethnography seeks to "describe and systematically analyze personal experience in order to understand cultural experience" (Ellis, Adams, & Bochner, 2011, p. 274). The complexity of the changes being undertaken by the schools in Christchurch, their unique, personal experiences of grief and trauma through the earthquakes and the recovery, and the subjectivity of the researcher working closely alongside schools and communities as they experience the changes taking place, all lend weight to consideration of auto-ethnography as a valid method for documenting and making sense of the process the schools go through.

Anderson (2006) called his particular approach to auto-ethnography "analytic auto-ethnography" (p. 373). Different from other approaches such as evocative auto-ethnography, which Anderson (2006) described as seeking to "take us to the depths of personal feeling, leading us to be emotionally moved and sympathetically understanding" (p. 385), analytic auto-ethnography is "committed to an analytic research agenda focused on improving theoretical understandings of broader social phenomena" (p. 375).

Anderson proposes five features of analytic auto-ethnography: complete member researcher (CMR) status, analytic reflexivity, narrative visibility of the researcher's self, dialogue with informants beyond the self, and commitment to theoretical analysis. This methodology acknowledges researcher subjectivity while still providing an opportunity to answer questions centred around how to create an environment that encourages a shift in teacher practice when the physical learning environments change.

IMPLICATIONS FOR TEACHERS, LEADERS AND DESIGNERS

To summarise, current research suggests that change is more likely to be successful when leaders understand the nature of change, build change readiness, adopt a leadership style appropriate to the context, engage in participatory planning and problem-solving, engage in sense-giving, and promote useful sense-making, and avoid change that is perceived to be of 'low cultural fit'.

What these success factors look like will vary from school to school, but an auto-ethnographical approach to analysing the approaches taken by different leaders as they guide their schools and communities through adaptive change should provide an improved theoretical understanding of what increases the likelihood

that adaptive change will be successful. The following scenarios model this approach in action.

THEORY INTO PRACTICE

Scenario One

As her school moves into the planning phase of their rebuild, the Principal of a 600 pupil urban, multi-cultural primary school (Principal A) facilitates a series of community and staff meetings whereby people are invited to discuss what the school and education in general mean to them, as well as their hopes and aspirations for their children. From this, the school's existing vision and mission statement are renewed and extended, providing school leadership with a clearer mandate with which to embark on changes such as a curriculum review and the development of an educational brief for the design team undertaking the rebuild. This process also serves to clarify for parents who are new to the area what the school is about and what its priorities are.

Simultaneously, the school leadership team develops a communication plan that aims to both inform and engage parents and community members. Using a range of communication channels including the school's Facebook page, public meetings, newsletters and emails home, open afternoons and student-led conferences, the school leadership team link to a series of videos, research papers, blog posts and articles that help to explain some of the recent trends in education. These include recent studies on the brain and how learning occurs, the impact of technology on education, and research into the growing importance of creativity and unstructured problem-solving.

Each week a different classroom is showcased on the school blog, with commentary that helps to demystify the teaching strategies being employed. Particular attention is paid to classroom layout and the use of furniture to help parents and community members to begin to 'read' the learning settings being employed.

As well as aiming to inform parents and community members, the school also identifies a series of decisions that require parent voice, and give some thought to the best way for parents to be involved in these decisions. Parent input is sought when deciding on landscape designs, the location of parking and drop-off areas, and the kind of playground equipment to be purchased. A series of digital and face-to-face methods are used to empower parents in this decision-making.

Scenario Two

In preparation for the wide-scale adoption of new-generation learning environments, the Principal of a 250 pupil rural primary school (Principal B) approaches two experienced, confident and enthusiastic teachers and asks them to begin prototyping elements of the kind of collaborative practice that will be possible in

the new learning environments. A modest amount of funding is made available to place a stacking glass sliding door into a wall between two classrooms and to allow the teachers to purchase some new furniture. These two teachers begin exploring the opportunities presented by this new environment. They set one room up for more teacher-led learning, and the second room for more student-led learning, and build student understanding of when to move between the two. Part of this prototype is regular reporting back to the rest of the teaching staff through once a month voluntary breakfast meetings. During these meetings, the two staff members describe over coffee and pastries the practices they are trialling as part of their prototype. They invite their colleagues to critique, ask questions and offer improvement, building a sense of collective self-efficacy over the changes taking place.

In addition, a working group is established to review the school's achievement data. Their remit is to identify areas of underachievement across the school and to work with teachers to support them to inquire into the effectiveness of their own practice. Professional learning groups (PLGs) are established to provide support for individual teachers, and together they begin to examine less effective teaching practices and explore new 'high potential' strategies. This process develops readiness for change and builds practitioner self-confidence.

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