Introduction to Part I: Change and Risk

Thomas Kvan and Kenn Fisher

Abstract This section presents research in managing change and risk inherent in the introduction of new learning environments. The topic is introduced, and a brief review is given for each chapter in the following section.

A focus on new learning outcomes provokes changes in teaching practice and calls us to consider new types of spaces in which the learning takes place. Change is fraught with risk yet, obviously, the opportunity cannot be realised without engaging that risk.

New learning environments might be an outcome of desired change in a school, they may be imposed by funding agencies that have adopted new standards as yet tried by a particular school, or they may arrive by other routes. While risk management might typically seek to minimise risk, the schools and their communities (leaders, teachers, students and more) might ‘grasp the nettle’ and seek to realise benefits from change. As Bradbeer notes in his contribution in this section, ‘teachers often finding themselves in a space between practicality and potential’. How then might they go about developing the potential and seek the practicality.

The process might start ahead of the delivery, if all is going well. Design literature has noted that good design outcomes are delivered when designers, clients and users are active in their participation. As Bojer writes in her chapter that in ILEs, these players are the architects, the institution and the teacher. The aspiration is difficult to realise unless actively engaged. She asserts that for an ILE to be ‘intentional’, the process of inclusive design must ensure the alignment of creative teaching, the school organisation and the space. The actual spatial formative process is a learning process. This is described as ‘research through design’ although this is not a simple process as it is participatory and co-constructed/designed. Five phases are posited: research, define, ideate, prototype and handover. Bojer proposes that the

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last is an 'activation phase' in which the players engage in a participatory process of activation, that is to bring a project into use once it is constructed. This extends the participatory design process by carrying responsibilities to occupancy. There is often a considerable period of time between design briefing, during which the players will be engaged in describing what they wish to achieve in a project, and by the handover after construction the individuals involved may have moved on and others taken their places. Thus, projects often experience discontinuities of intent and practice, resulting in diminution of value in the result and no change in practices to enable better learning outcomes. Bojer concludes by noting that space itself will not change pedagogy but better engagement in the process of delivering learning spaces will benefit outcomes: 'the teachers cannot be expected to know how to use the ILEs as a tool if they are not involved directly or indirectly in the design process to match pedagogical practices with the intentions of the space'.

Bradbeer then examines 'the role of pedagogical and organisational structures alongside levels of autonomy experienced by teachers on adapting to new spaces' and observes 'tensions may be felt between predominating or created structures, and aspired or idealised practice'. An action research-based practising deputy primary school principal, Bradbeer recognises that successful innovative learning environments require equally successful collaborative teachers. This team or co-teaching approach, in contrast to the very habituated model of school education we all still live with, requires significant curating of agency, autonomy and adaptation with teachers to transition to an alignment between pedagogy and space. Bradbeer coined the phrase 'differentiated teaching requires differentiated spaces', a comment that is effectively the motto for the significant change management program of the New Zealand Ministry of Education Modern Learning Environments project (NZ MoE, 2019). Bradbeer's research is an essential contribution in understanding the extensive transitions efforts in change management and risk mitigation. His chapter in this book examines the transition that teachers must navigate as they leave teaching practice conducted in a context of autonomy and spatial isolation and embark in ILEs on a practice of collaboration and proximity to others. He addresses the agency and self-management that support these different modes of practice through structuration theory, identifying that temporal, spatial, organisational and linguistic structures are active in addition to the physical, spatial structures. By approaching these structures as enabling rather than constraining, Bradbeer illuminates how the transition into ILEs can be better understood and therefore enacted.

While appropriate structures of the kinds Bradbeer identifies are essential, so too are specific structures to address risk and to assist the participants through its successful translation from negative consequences to positive outcomes. French in a similar vein wonders what a successful innovative learning environment looks like. She examines the transitions into ILE and seeks to characterise successful transitions. Aspects of such transitions examined include four key facets: organisational enablers, such as a shared language with which to engage; the relationships between the key actors (students, teachers); purposeful structures; and maintaining a culture of risk. Her chapter develops further examination of purposeful structures, what she calls 'layered scaffolding', that provide the appropriate degree of support and guidance required

for successful transitions. She describes these as multi-layered, from policy bodies (government departments, school councils) to those developed at the individual level. It is the presence of these scaffolds that characterise contexts of successful transitions and she notes that these scaffolds and the transitions they enable are powerful tools to develop further change to support innovative learning.

Key players in these transitions are the teachers and the chapter by Jones and Le Fevre seeks to identify teacher perceptions of risk—with associated barriers—in endeavouring to establish ways of mitigating these through communities of practice (Wenger, McDermott & Snyder, 2002) and address how teachers can be equipped to manage the risk of change. In particular they consider ‘perceptions of risk’ and how these can be barriers to change. Success in change is therefore considered through a better awareness of these perceptions. The authors define risk as ‘loss, significance of loss and uncertainties’. All three of these can have a profound impact and effect on individual teachers and a mitigation strategy is essential to enhance the likelihood of an innovative learning environment succeeding in a resilient fashion. They note that ‘the unquestioning acceptance of ingrained personal practical theories of teaching may result in teachers closing themselves off to learning how to work in ILEs’. The chapter explores risk and uncertainty, importantly noting that risk is a social construct (risk in one community may not be considered such in another) and the ways in which such risks are validated and addressed are also situated. In this framing, realising the potential of a new situation (the change to an ILE) will have locally defined risks, including those perceived by the teacher and school leaders. Their research articulates these risks and the contexts in which they are perceived, concluding with observations on implications for policy and practice. Their conclusions include adopting a ‘communities of practice’ approach to share the risk taking and mitigation strategies, thereby avoiding the self-induced risk aversion.

With the background on the contexts and management of risk to deliver improved learning experiences, we turn in the final two chapters to the practice within the places created. Marcarini considers schools in Italy and Denmark to reflect on the duality of space and learning and how the two aspects are both actively engaged in enabling better learning. This learning experience can be personalised for a student as the teacher recognises the opportunities in a space and draw upon their practice to exploit the opportunities. She identifies that the two are inter-related. New approaches to teaching permit the better use of new spatial opportunities and new spatial opportunities enable new approaches to teaching. Her analysis illustrates that an awareness of the duality and the contributions of the leadership and the students themselves are necessary in translating the challenges of change into opportunities for discovery. She sees the development of a ‘bridge culture’ as an enhancement of co- and team- teaching, as it posits a broader organisational and systemic shift in school culture overall, not just in the co-teaching cohorts of students. In summary she suggests that such a ‘collective practice that builds together shared social meanings’ re-purposes the school culture itself as ‘real’ third educator.

By focusing on a specific learning activity, Dyer considers the contribution of spatial affordances to the specific activity of learning to read. Engaging with the idea of affordances (Gibson 1977), she draws on Fallman’s (2008) ‘interaction design

research triangle', a model which forms a three-way relationship between design practice, design studies and design exploration. Dyer uses literacy education which itself seeks to connect beginner readers to the content, their emotions/bodies and the spaces they are inhabiting. The connection of literacy to spatiality is rarely made so this is a unique and risky change strategy to take. However, Comber & Nixon (2008) do offer a 'safety net' for this approach. This review thus illuminates a design process linked to a learning outcome. As such, it illustrates how teaching practice can inform the conceptualisation and realisation of pedagogical space and design activity.

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