CRAIG DEED

2. A MODEL OF TEACHER ADAPTATION TO OPEN-PLAN SETTINGS

KNOWLEDGE AND ADAPTATION

This chapter examines teacher adaptation to open-plan learning communities. Teacher adaptation is grounded in the practical knowledge and contextual awareness of teachers (Cochran-Smith & Lytle, 1999; Darling-Hammond, 2006; Kelly, 2006). Here, it is argued that adaptation is a pragmatist process of seeing differently in order to act differently (Schon, 1983; Verloop, Van Driel, & Meijer, 2001).

Teacher adaptation is conceptualised as an imaginative and dynamic (re)occupying of the open-plan learning environment, providing a bridging mechanism between narratives of the possibilities and constraints of prior experience, and projecting and enacting alternative learning experiences. This involves active interplay between individual and social knowledge, each informing the other (Borko, 2004). Exercise of teacher knowledge informs opportunities to shape and frame learning environments (Putnam & Borko, 2000).

A model is theorised that offers an explanation of teachers' adaptation to their working context. These interactions are drawn specifically from accounts of teaching practitioners' experience, and informed by literature about the relationship between practical knowledge and research. This chapter draws on pragmatist perspectives of knowledge as justified beliefs derived from analyses of experience (Dewey, 1938/2008). Teacher adaptive processes are conceptualised as a pragmatist sequence of problem recognition, including analysis of key elements, and development of possible solutions, trialling and review. Pragmatists are not seeking the truth but rather attempt to recognise the impact of a concept on practice through consideration of practical meaning and practical consequences (Misak, 2007).

The model provides an account of the complexity of practical adaptation to new spaces that are nested within institutional environments. It provides a more nuanced view of abstract models of adaptation, such as that put forward by Blackmore, Bateman, Loughlin, O'Mara, and Aranda (2011). Blackmore and colleagues (2011) proposed a four stage conceptual framework of four overlapping temporal phases: design, transition/implementation, consolidation, and re-evaluation/sustainability. Their model is a useful scrutiny of teacher and student inhabitation and engagement with alternative school learning environments.

This chapter contributes to ongoing discussion about teaching as situated and collective work (Borko, 2004; Grangeat & Gray, 2008; Shulman & Shulman, 2004),

V. Prain et al. (Eds.), Personalising Learning in Open-Plan Schools, 27–41.

expert models of teaching knowledge (Shulman, 1987; Sternberg & Horvath, 1995), and professional learning communities as a means of teacher adaptation (Darling-Hammond, 2006; A. Hargreaves, 2003; Korthagen, 2010; Meirink, Imants, Meijer, & Verloop, 2010; Pridham, Deed, & Cox, 2013).

TEACHER PRACTICAL KNOWLEDGE AND INQUIRY

"Teaching is intentional – one must teach something – and the teacher must see what is being taught" (Clark, 2005, p. 296), leading to questions about whether the intentions have been achieved, or uncertainty about how to teach more efficiently. For the teacher, there is "relatively little hard evidence of 'what works'" (D. H. Hargreaves, 1997, p. 410). Teachers need a practice model that enables them to cumulatively build knowledge by drawing upon diverse perspectives to make meaning and gain insight from ongoing experiences (Korthagen, Loughran, & Russell, 2006).

Teacher theorising about the "complexity, artistry, and the demandingness of classroom teaching" (Clark, 1988, p. 11) is broadly referred to as practical knowledge (Elbaz, 1981). Connelly and Clandinin (1988) characterised this knowledge as emerging from past personal experience, informing current and future practice. Clandinin (1985) contends that practical knowledge is neither entirely theoretical nor simply practical. Rather, it is a contextually grounded dynamic blend of formal and informal knowledge (Hoekstra & Korthagen, 2011). This leads to the blending of technical knowledge with an intuitive or practised sense of what is likely to work – Darling-Hammond's (2010) "wisdom of practice", Berlin's (1996) "practical wisdom", or Buitink's (2009) "practical theories". It is what Lunenberg and Korthagen (2009, p. 226) identified as a capacity to "deal 'wisely' with particular situations in the course of teaching."

Elbaz (1981, p. 46) defined practical knowledge as "encompassing knowledge *of* practice as well as knowledge mediated *by* practice." This refers to knowledge that is constructed through ongoing experience and interaction with different perspectives about the meaning of that experience. In this way, a teacher's practical knowledge is developed through the practice of being a teacher and through integrated interaction with other teachers.

While teaching knowledge is exemplified as practical (what works), it also involves theorising about practice (what else might work). Cochran-Smith and Lytle (1999) describe this iterative knowledge building process as practical inquiry. Teacher, or practical, inquiry is relevant to address the questions, dilemmas and needs located in a teacher's day-to-day contextual interactions with other teachers and students (Grangeat & Gray, 2008; Richardson, 1994).

A principal driver of teacher knowledge development is the process of practitioner inquiry that sits on the "border between research and teaching" (Hammer & Schifter, 2001, p. 441). While practitioner inquiry is broadly congruent with the notion of teacher as researcher, it emphasises localised action rather than abstraction. One

powerful form of practitioner inquiry is interactions with other teachers, hence recent consideration of professional learning communities (Grangeat & Gray, 2008). Lieberman and Mace (2010) identified two drivers for this trend: a move from isolated to collegial practice; changes in school learning space, including physical and virtual, affording an environment where teaching practice becomes more social and public. These collaborative levers have allowed informal and formal sharing of ideas, knowledge, values and orientation of teachers across a range of contexts; leading to questions about effectiveness of teaching approaches and means of improving standards and practice (Clark, 1988; Cochran-Smith & Lytle, 1999).

Hammer and Schifter (2001) identified that practitioner inquiry is directed towards action in immediate time and space, largely invisible, and reliant on observation and a sense of what is happening in the classroom. This inquiry is also not systematic, as the focus narrows onto a pressing issue, usually conducted in isolation, and involves personal and non-critical reflection. These informal processes offer important practice-based knowledge as a basis for teaching activity (Gallimore, Ermeling, Saunders, & Goldenberg, 2009).

Yet there is also a need for dynamic "iterative engagement in constructing and reconstructing professional knowledge using various perspectives" (Kelly, 2006, p. 509). This requires an intensity of thinking about the complexity, uncertainty, and unpredictability of the interaction between teaching and learning (Clark, 1988; Hoekstra & Korthagen, 2011; Zeichner, 2010). Borko (2004, p. 8) commented that the key question becomes "how can teachers represent the knowledge they acquire in a more principled and abstract form than in the past, while retaining its practical character?"

Investigating the narrative of teacher reasoning and practice "means delving into the subtle interplay between the intractability of social institutions and the options they offer for agents who have knowledge … of how those institutions work" (Giddens, 1989, p. 298). One means of representing knowledge is through becoming a reflective practitioner (Schon, 1983; Yost, Sentner, & Forlenza-Bailey, 2000). Loughran (2002) makes the point that the framing and reframing of a problem is a crucial part of knowing about teaching. Reflecting on experience has the potential to change or clarify understanding, leading to reasoning about alternative activities (Boud, Keogh, & Walker, 1985). Collaboration through a practitioner inquiry process is envisaged here as the means to meld personal and social reflection with the generation of teacher practical knowledge. Practitioner inquiry involves a mindful awareness of current experience, opportunities and problems, and the reflective element makes "conscious and explicit the dynamic interplay between thinking and action" (Leitch & Day, 2000, p. 181).

Practitioner inquiry involves an examination of an experience in terms of physical, social and structural-contextual interactions (Clandinin, Pushor, & Orr, 2007). This approach recognises that personal, social, and cultural narratives are as significant as pedagogical content knowledge (Goodwin, 2010; Kelly, 2006).

Shulman and Shulman (2004, p. 259) propose a model of teacher communities that afford engagement in "theory-rich, open-ended, content-intensive classrooms." The model requires teachers to have a vision of what they want, be motivated to achieve this, understand contributing concepts and principles, be able to transform practice, be capable of learning by reflecting on experience, and to participate in a learning community (Shulman & Shulman, 2004).

This is consistent with Giddens' (1984, p. 71) definition of context as "strips of time-space" that are more widely connected to the "broader properties of social life" (Giddens, 1984, p. 119). This is another way of saying that while teacher knowledge is generated through personal practice, there are "elements of teacher knowledge that are shared by all teachers or large groups of teachers" (Verloop et al., 2001, p. 441). It is contextualised action that provides the possibilities and constraints influencing (as perceived and then reasoned into) teaching practice. This approach attempts to identify teacher conceptions and subsequent reasoned application of theorised ideas in practice, while being alert to the argument that educational transactions are "essentially contested" (Clark, 2005, p. 293).

TEACHER ADAPTATION THROUGH CONTEXTUALISED INQUIRY: A CASE STUDY

This case study is an account of the process of practitioner inquiry grounded in the dynamic process of adaptation to open-plan learning communities. Following Elbaz (1981), this case of practitioner inquiry demonstrates how teachers theorise about the possibilities and constraints of their practice, and how this theorising is mediated by their practice.

Problem Recognition

Dewey (1938/2008) claimed that problems are merely unclear situations, and inquiry is the process of seeking clarification. This stage of inquiry involves problem recognition, including identifying the sociocultural context, and relational interactions. "Problems which induce inquiry grow out of the relations of fellow beings to one another, and … the meanings which have developed in the course of living" (Dewey, 1938/2008, p. 42).

The process of practitioner inquiry was initiated within Grevillea College by the senior management team who were questioning whether the learning spaces were being used in an optimal way. The senior staff wanted teachers, when they were planning learning activities, to overtly think about how they were going to use the open-plan learning spaces. The shift was to broaden teacher thinking from content and pedagogy to consider the 'openness' concept and context.

The school had already instituted a lesson model, used by all teaching staff. This lesson model required teachers to address a series of questions related to the beginning of the lesson (e.g., what are your learning intentions and success criteria),

explicit teaching (e.g., how will you teach the concept or skill?), guided practice (e.g., what activities will you ask students to undertake?), differentiation (e.g., which students do you anticipate will need additional support, and how will you provide it?), application (e.g., what independent practice will students undertake?), and review (e.g., how will you get students to reflect on their achievements?). The lesson model encouraged pedagogy of explicit teaching followed by application through independent or small-group activities, followed by guided review at the conclusion of the lesson. The implication was that explicit instruction would take place at the lesson's start and end, while students' learning activities would be afforded by the open-plan learning environment.

Analysis of Key Elements

Grevillea College held a learning spaces audit as a reference point for ongoing planning for professional learning. The author, part of the university-based Improving Regional Secondary Students' Learning and Wellbeing (IRL) team, became involved at this point.

Table 2.1 shows how each way of knowing (practice and abstract knowledge) can act as a resource in the interactions of a professional community of inquiry (Ottesen, 2007). The first column shows the questions identified by the senior staff members of the school. The questions had formed the basis of developing the local lesson-planning framework. The third column identifies the questions formulated by the IRL project team. These questions formed the basis of a number of different investigations and case studies. The central column is an integration of both practical (school staff members) and theoretical (university project team) perspectives; and acknowledges the distributed nature of expertise. The answers generated to these questions informed, to some extent, the resolution of both perspectives.

Table 2.1. Integrating practical and abstract considerations

Senior staff questions (Practical)	*Practitioner inquiry (Integrated)*	*University researcher questions (Theoretical)*
What works?	What main teaching strategies are currently used in the open-plan classroom?	What does quality learning look like in an open-plan environment?
How to use the classroom space more effectively?	What is the most successful strategy currently used in our open-plan classrooms?	How do open-plan environments interact productively with pedagogy?
	What are the main enablers and constraints of changes to our teaching?	

Trialling and Review

The trialling and review stage was action-oriented, based on inquiry into ongoing and possible practice. A survey was generated asking all teachers to identify a space they regularly taught in, what approaches they used, what approaches they would like to use, and what may afford or constrain effective teaching and learning in that space. From a population of 45 teachers, 32 responded to the survey. The survey provided an overview of practice that was discussed with senior staff members, with a focus on what they thought quality teaching was in an open-plan classroom context, and what practical wisdom they could pass on to teachers about working in this type of environment. This process asked teachers and senior staff members to draw directly on their experience and reasoning for practice. In the survey analysis each learning environment appeared to have a number of agreed routine pedagogical interactions, outlined in Table 2.2.

The different learning environments were seen as enabling a range of practices, with innovative practice a possibility. It was possible to identify a common narrative through the individual teacher theorising around shared experience in terms of physical, social, and structural contextual interactions (Clandinin et al., 2007):

> There is ample space to allow one to have to freedom to be fluid and flexible in one's approach… occasionally. (Teacher 28)

> Space-specific strategies were seen as emerging from conventional practice, rather than a radical shift. (Teacher 23)

> Good teaching will occur regardless; it is just more difficult if you are in the wrong environment. (Teacher 22)

In the neighbourhood the most common practice was to start with explicit teaching, usually based around a whiteboard, followed by small group or independent work with students more dispersed. Student choices appeared to be related to the type of task, where they conducted the task, and whether they worked individually or in small groups. Technology was used by students regularly. The large neighbourhood spaces enabled movement of students and the ability for students to move to a comfortable location for work:

> To have flexibility in drawing students in to provide explicit instruction, then to allow students to choose a space when given the opportunity to work on collaborative or independent activities. (Teacher 18)

The Socratic studio was mainly used for explicit teaching, media, and class discussion. There was a close link between the enclosed and relatively small space and its primary use for learning tasks requiring interaction and related noise. The Da Vinci studio, used mainly for science and art teaching, was used for project, inquiry and experiment-based learning approaches. Again, there was a link between the purpose-built nature of the space and the teaching and learning approach. The Einstein area was the least formally organised space, used as a break-out area for independent and small-group work.

Table 2.2. A map of teacher practical knowledge

Learning environment	*What currently works?*	*What might work?*
Neighbourhood • Flexible teaching and learning practices • Varied furniture types and layouts	Explicit teaching Flexibility to allow students to choose space for work Social learning Use of technology	Increased sharing resources and ideas between colleagues Social learning Expanded use of technology Productive learning Self-directed learning
Socratic Studio • Enclosed teaching space • Audio-visual resources	Explicit teaching Use of media Class discussion	Use of interactive technology Increased student autonomy
Da Vinci Studio • Arts and Science learning • Project space	Explicit teaching Experiments Project-based learning Social learning	Exploring models of learning through experimentation Multi-disciplinary project work
Einstein Area • Breakout space • Main entry/exit to learning community	Independent and small-group work Break-out area Informal interaction	More opportunities for independent learning – (structured and scaffolded)

The teachers also had a common perspective about what they wanted to do in the spaces. Several teachers indicated they wanted to be involved in more team teaching or collegial practices such as sharing ideas and resources. They identified that these practices could be supported by strategic timetabling, more time for collaborative planning, observation, discussion, and reflection with other teachers:

> It is easy to be flexible, reflective and change your approach when you get to plan, teach and reflect in collaboration with others. The key thing is teaching together. (Teacher 3)

> The open learning spaces have allowed me to make regular informal observations of colleagues at work, picking up many strategies that I have successfully implemented into my classroom. (Teacher 6)

The teachers also indicated they wanted to enact more independent learning strategies including inquiry or project-based approaches. An increase in the use of technology, perhaps for social learning or interaction, was also indicated. The teachers thought that this could be enabled by access to specific instructions on how to structure and scaffold these approaches, and sharing practical suggestions on how to teach with the different spaces.

A key area for continued development was to improve the productivity of the learning spaces. There seemed to be a major emphasis on explicit teaching and

controlling and shaping student activity as a precursor to student movement and use of the space for required learning tasks:

> Students lose focus due to the open and distractive nature of the open learning areas. (Teacher 13)

Teachers generally indicated a need to build student capacity for more autonomous work. A key teacher adaptation focus was therefore on balancing explicit teaching, which appears as a dominant pedagogical hinge for most learning activities, and the development of student autonomy. This was the basis for subsequent teacher development planning.

Explicit instruction was seen as the lynchpin, ideally providing a form of scaffold that shaped and focused student effort, but did not always tell students what, how, when, and where to complete a task (thus encouraging autonomy). The dilemma for senior staff members from the inquiry process was now precisely how to better incorporate the learning spaces into pedagogy?

The teacher responses indicated a conceptually-sensitive adaptation to the open-plan learning environment contexts (Deed, Lesko, & Lovejoy, 2014). These adaptations included the use of pedagogy that was contextually grounded, attempts to increase student agency, and some consideration to team- and collegial-teaching practice. Most apparent was the lack of aggression and conflict in the form of recurring student management issues, perhaps as a result of the humanising and democratising influence of the neighbourhood affordances. This was noted by all teachers during informal conversations as part of ongoing site visits and observations over the three years of the IRL project.

From Inquiry to Action

Based on the map of what was working and teacher perceptions of action possibilities, the senior staff members discussed how to effectively use the neighbourhood learning spaces. These discussions were influenced by university staff trying to resolve their own conceptual questions. As a result of these abstract and practical considerations the school and university jointly identified, as a starting point, a set of teaching strategies than were conducive to teaching in open-plan learning environments. These strategies represented a focus, generated through the inquiry process, for the next stage of on-the-ground teacher adaptation. The strategies emerged from the gap between *what* works and *what might* work, as identified in discussions between the teachers and university staff. The strategies were:

- moving from individual to collegial team-teaching by learning across disciplines, and extending learning within a discipline;
- increasing student autonomy by designing tasks that afford selecting, enacting, monitoring, and adapting personal learning strategies, and active construction of knowledge;

- increased student use of emerging technologies with an emphasis on social learning through virtual collaboration, and multi-media to represent and communicate what they have learnt;
- enactment of pedagogy for deep learning and critical thinking, including multiple solutions or solution pathways, and effortful elaborations and analysis;
- making teacher and student learning visible in the classroom by representation and communication of the learning experience, and explanation of the causes of learning success or failure.

The process reported here is somewhat circular, as each inquiry stage leads to further questioning and propositions about practice development. However, the case demonstrates how the general process of practitioner inquiry, grounded in the conceptual (university driven) and contextual interactions (practical knowledge and day-to-day activity), can inform localised and focused teacher learning and adaptation. As noted by Dewey (1938/2008, p. 140): "There is continuity in inquiry. The conclusions reached in one inquiry become means, material and procedural, of carrying on further inquiries."

A MODEL OF TEACHER ADAPTATION

Contemporary open-plan classroom spaces express and authorise conceptions of school-less space, humanism, democracy, agency, community and flexibility. Although not suggesting linear causality between space and pedagogy, there is a likely conceptually-sensitive adaptation to openness: different and experimental pedagogy, increased student agency, distributed expertise, interdisciplinary and team teaching within neighbourhoods, variable class size, and use of informal and irregular space and time for learning (Deed & Lesko, 2015). Following this, a model is proposed of teacher adaptation to their working environment.

The discussion is framed by a refined version of a model proposed by Lunenberg and Korthagen (2009) of a triarchic relationship between practical knowledge, theory, and contextualised experience. Lunenberg and Korthhagen's (2009) original model is represented by the shaded triangle, in Figure 2.1. In the refined version here, theory has been replaced by different perspectives, and an agency dimension added.

This model shows that teachers employ knowledge gained from both experience and interactions with different perspectives to inform and shape their actions. It also makes clear the role of agency as a means of reacting in different ways to a context. This model relies on its abstraction to achieve its purpose of identifying some of the key interactions in teacher development. It is acknowledged that these relationships and outcomes are open to ongoing negotiation and questioning (Schon, 1983). This model of knowledge development and action identifies some interactions that could be employed to strategically influence teacher adaptation (Bronkhorst, Meijer, Koster, & Vermunt, 2011). The model emphasises that specific practical knowledge is a requirement for making any change work (Mehta, 2013).

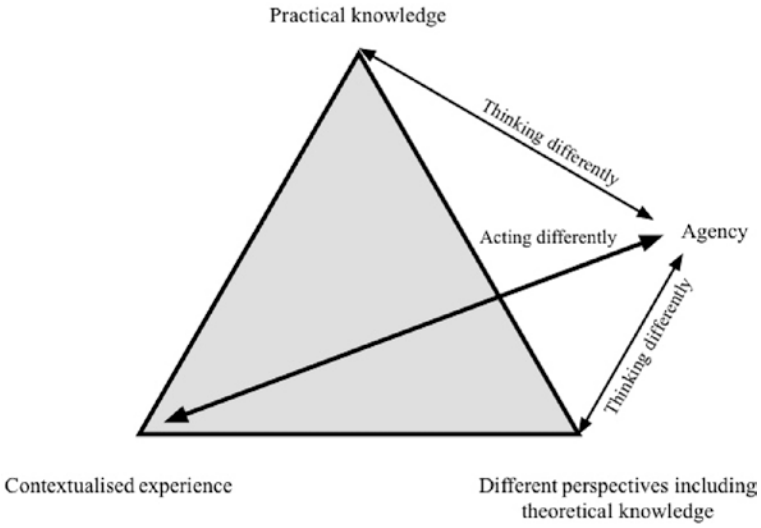

Figure 2.1. Teacher adaptation (context, knowledge & agency)

The model identifies that the practical question of what works can be resolved by consideration of the interaction between an individual's knowledge base, context, and the distributed expertise of peers and university staff. This does not suggest that a specific outcome of this process can be up-scaled or replicable. Rather, a model of the interactive process and critical elements of expert adaptation can be applied to different contexts. This accords with Mehta (2013, pp. 481–482) who asserts that this approach is appropriate for a study of teacher knowledge and learning, rather than the "clinical, relatively decision-free form we see in medicine … because the real-time demands are too great and the impact of any given decision is highly context dependent."

The axis from *practical knowledge* to *contextualised experience* applies to the immediacy of classroom interactions. This refers to intuitive decisions, routine action or instant reaction (Eraut, 1995). Teachers are bound by the day-to-day intensity of their practice, meaning there is an immediateness and concentration of concern with what works. The addition of *different perspectives* to this axis adds a degree of abstraction and criticality to the building of teacher knowledge. Different perspectives also include theoretical knowledge; provided in this case by university research staff. This interaction between individual teacher practical knowledge and different perspectives is a characteristic typical of a community of learning. These interactions can also be seen as reflective learning processes involving deliberate analysis, decision making and practice (Bronkhorst et al., 2011; Eraut, 1995). The authority for a community of practice is perhaps generated by the open-plan

environment, allowing informal observation or discussion with other teachers within the learning neighbourhoods. More formal team planning, teaching, or review may also allow interaction with different perspectives. In the case reported here the use of the survey also enabled this interaction. The accessing of the distributed expertise of peers also ensures an informal validation or testing (or perhaps even a stimulus) process against the reality of daily routine work (Mehta, 2013).

An adaptive dimension is included in this model, identifying how *agency* is needed to enact knowledge-in-action. Imaginative manoeuvring to connect with the future is a significant characteristic of human agency (Dewey, 1981). This highlights the agentic orientation and underpinning of teacher adaptation as a contextualised activity; the tension and interplay between agency and structure must be accounted for in any examination of adaptability to workplace change (Emirbayer & Mische, 1998).

Each of these perceptions, possibilities and constraints, interactions and deliberations is grounded in contextual experience. Agency, as a driver of adaptation, is about deliberately shaping the learning environment by responding to the unique expressions and authorisations of experience of teaching and learning as part of that experience. The reflexive version of agency shown in the model balances realism or pragmatism of teaching with the action possibilities of open-plan learning environments. This is the contextualising of knowledge and action: teacher development grounded in practice. Exertion of individual agency in a social classroom context may also encounter different purposes requiring negotiation between staff or students to determine rules, roles and agendas (Alterator & Deed, 2013).

Agency has multiple meanings, but here it is conceptualised as a key component of teacher adaptation. This is demonstrated when a teacher makes a reasoned or knowledgeable choice that is sensitive to the context for action. The implication is that a teacher must be aware of their perceptions and reasoning, and have a view of their own learning as a process of resolving the contestability of different classroom contexts. The model outlined here assumes that teacher knowledge and action goes beyond individual activity, and includes collaborative and critical aspects, based on a disposition and capacity to engage with contextual expressions and authorisations (Deed & Lesko, 2015). Agency becomes transformative when it draws on and informs a collective knowledge base (Mehta, Gomez, & Byrk, 2012).

The case showed that teacher adaptation in new spaces is about acknowledging that the space is perceived and represented by multiple perspectives, contributing to a more complex framing and shaping of the learning environment. The use of what might be characterised as an informal and distributed professional-learning community model drew upon the breadth and depth of perspectives, including questions, needs and routines of teachers trying to make the spaces work on a day-to-day basis.

The model addresses the process of adaptation or "practicalising theoretical knowledge" (Cheng, Tang, & Cheng, 2012, p. 789). Cheng and colleagues (2012)

suggested this process includes identifying, through experimentation, reflection and adaptation, strategies that are workable from multiple perspectives. In other words, agency, or the capacity to imagine and act differently, is inherent in the practicalising of teacher knowledge (otherwise referred to as teacher adaptation). Following Dewey (1896), knowledge, evident in teachers' practical reasoning, emerges from attempts to resolve practical questions from the classroom, melding of abstract with practical ideas. The model makes clear that it is individual and collective teacher's knowledge of their work and workplace that supports exercising judgement and discretionary decision making (Mehta, 2013).

IMPLICATIONS AND CONCLUSIONS

The process of teacher adaptation is conceived of within an action-oriented frame, grounded in a narrative of possibility and constraint as expressed and authorised by the open-plan learning environments. This is not an idealised model of collective transformation, rather a set of diverse individuals theorising and enacting practice. At the individual level, each teacher had to determine their readiness to engage with professional learning and address the question of how to situate inquiry within the narrative and culture of teaching and learning at that school.

Teacher adaptation is conceptualised and demonstrated in the case study as a dynamic alignment of context, knowledge (including perceptions of action possibilities and power to act differently), and institutional constraints. In many ways this precludes an orderly binding of the transition and consolidation phases (as conceived for example in the model proposed by Blackmore et al., 2011). Rather, there appears to be a space between these two phases, where agency is subject to the mitigating weight of institutional routine. This is not to offer a pessimistic version of adaptation. Rather, it suggests that a space does exist for thinking and acting differently, and that this is generated from the expressions and authorisations of the up-scaled open-plan environment (Deed & Lesko, 2015). Further research is required to examine in-depth the conditions and influences on the achievement of consolidated and sustainable stages of adaptation.

Based on the literature and this discussion, it is clear that the process of teacher adaptation and exercise of agency in open-plan learning communities has the following characteristics:

- while the abstract nature of open-plan learning environments affords a number of possibilities, these must be balanced with the day-to-day routines of school-based teaching;
- teacher adaptation is a personally and collectively contested processes, situated in specific contexts, although shaped by larger agendas of school and social change;
- adaptation refers to taking control over an experience through an intense (although largely practical) inquiry process;

- each teacher will make a reasoned choice about their teaching practice, balancing routine with difference;
- teacher reasoning about what might work will be based on their practical knowledge about what works;
- teacher adaptation involves moving from the immediacy of classroom interactions to building knowledge by seeking and critically interacting with diverse perspectives;
- although teacher adaptation is a personalised experience, these processes draw upon and inform a collective knowledge base

The university has a key role in teacher adaptation, in particular to:

- recognise university and school-based expertise as unique contributors to the knowledge building processes of practitioner inquiry;
- frame teacher adaptation through a critical examination of teacher perceptions and reasoning about contextualised experience;
- contest habitual practice through the introduction of a range of conceptual questions and strategies informed by research.

This chapter has demonstrated that the possibility of teacher adaptation being effective improves when it involves thinking and enactment of quality teaching practice grounded in contextual experience. Further, teacher adaptation to new contexts involves a focus on identified strengths and strategic imagining of different ways of being. This expression of agency is informed by an orientation to both adapt and critically question that adaptation.

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