ACCESS: CONTEMPORARY ISSUES IN EDUCATION

2017, VOL. 37, NO. 1, 8–18 https://doi.org/10.1080/00131857.2016.1278354



Re/assembling 'innovative' learning environments: Affective practice and its politics

Dianne Mulcahy (1) Carol Morrison

Melbourne Graduate School of Education, The University of Melbourne, Victoria, Australia

ABSTRACT

In this article, we argue that the interest being taken by governments in establishing innovative learning environments (ILEs) in schools relies on a conception of space as a largely neutral arena. In consequence, relations of space and power inherent in the infrastructural shift to ILEs tend to drop from view. Adopting an assemblage approach to investigating learning environments, and exploring ILEs as they are playing out in Australian schools, we strive to surface what drops from view. Taking ILEs to be sociomaterial assemblages, we work with empirical material and trace how they assemble and reassemble. The account is less concerned with what works in ILEs; rather, its focus is on their 'workings' as assemblages of relations and most particularly, affective relations. Thus, we explore two affective encounters involving school leaders, teachers and students showing the ways in which they position and are positioned within ILEs. The argument is made that the assemblage approach which is non-deterministic and relational affords new ways of understanding what ILEs are and how they work and who they work for. And, that attending to affective practice brings into view the micropolitics through which infrastructural shifts and infrastructural policy-making are made.

KEYWORDS

Innovative learning environments; assemblage; affective practice; affective politics

ARTICLE HISTORY

First published in Educational Philosophy and Theory, 2017, Vol. 49, No. 8, 749–758

Introduction

One of the things ... I constantly have to do is challenge them, and challenge it in a really direct way, which is simply go in and say – 'the wall is closed, why is the wall closed?'... You challenge that based on the vision and the reasons for the change in the first place. 'So you've closed the doors – why have you done that, because at (this) school, the understanding is this because we believe this – I need you to open the doors'. (Secondary school Principal)

Students are certainly finding it a very social situation. I mean they're pretty much always close to and opposite another person. There's very little sort of opportunity to sit anywhere by yourself. The whole place is like a fishbowl, you know there's glass everywhere. So there's little opportunity to sit by yourself. There's not a lot of rows, and just being able to be in your own world. (Secondary school teacher)

These comments, made by a secondary school Principal and a member of her staff during an inter- view about their experiences of the learning spaces recently introduced to their school, usefully draw attention to the strength of feeling that attaches to the take-up of flexible and open spaces of teaching and learning. These spaces are fast becoming the strategic option for the building of new schools and educational facilities in a number of countries, including Australia, yet they are often framed as unproblematic—a self-evident good. Investment in these new infrastructural

arrangements appears necessary, even inevitable, given that they are thought to provide twenty-first century learning, the kind of learning required for life in the twenty-first century in the light of a society that is in a state of rapid transformation. In researching them, the focus tends to fall on 'what works' in them or how they can be made to work more effectively (see for example, Byers, Imms, & Hartnell-Young, 2014; Park & Choi, 2014; Veloso, Duarte, & Marques, 2013). Our aim here is different—to demonstrate the value of a more critical, provisional and practice-oriented account of these arrangements, whereby the work they do and who benefits from this work can come into view.

The new infrastructural arrangements are called variously 'modern learning environments', 'new generation learning environments', 'twenty-first century learning spaces', 'twenty-first century learning environments' and 'innovative learning environments'. While the differences between these designations are not insignificant, we lead with the term innovative learning environments (ILEs) inasmuch as it is used to name a comprehensive programme of research on the nature of learning and learning environments within and beyond school (Organisation for Economic Cooperation and Development [OECD], 2013). As the OECD has it, a learning environment is an organisational architecture within which *learning spaces* are embedded. Defined as a *material resource* for learning, these spaces are intended to 'facilitate engagement, be motivating, and recognise the social nature of learning, allow for individualised pedagogies and formative assessment as well as larger group work, and facilitate work that makes a variety of connections' (OECD, 2013, p. 58). In the broader policy literature, the terms learning environment and learning space are often used interchangeably (see for example, Department of Education and Early Childhood Development, 2009b; Ministerial Council on Education Employment Training & Youth Affairs (MYCEETYA), 2008). For present purposes, we too do not draw a strict line between them.

The article is premised on the idea that space is an underacknowledged and undertheorised concept when attempting to understand how ILEs work and the political work they do. Thus, initially, we outline two interpretive frames for thinking and working with the concept of space, and show how each informs and attaches to a particular learning spaces literature. Bringing an analytic of assemblage (Deleuze & Guattari, 1987; Latour, 2005) to bear and taking into account the idea that assemblages are produced by affects (Kennedy, Zapasnik, McCann, & Bruce, 2013, p. 47), we then trace the 'workings' of ILEs using empirical material collected in Australian schools. The argument is made that the assemblage approach which is non-deterministic and relational affords new and more inclusive ways of understanding what ILEs are and how they work and who/what they work for. And, that attending to affective practice brings into view the micropolitics through which infrastructural shifts and infrastructural policy-making are made, and are also therefore open to being remade.

Accounting for ILEs: orthodoxies and other stories

A certain silence exists in the educational literature regarding the concept of space and the ILE as a spatial set-up (see for exceptions, Boddington & Boys, 2011; Leander, Phillips, & Taylor, 2010; McGregor, 2003, 2004; Mulcahy, 2015). This silence is consequential most particularly for 'implicated actors' (Clarke & Montini, 1993), those charged with using these spaces who may not have had a hand in their design. Attempting to break the silence, we attend to the assumptive positions underpinning the use of the term space in contemporary commentary on ILEs.

Orthodoxies: received views

Educational discourses of learning space are commonly set within an epistemology that takes it that meaning and matter belong to different categories and thus are different kinds of things (Law, 2011). This epistemic position is widely held in the education policy and policy advisory literature.

Thus, learning spaces are conceived as *physical entities* that materially support, resource and facilitate learning as illustrated in the following extracts from accounts of learning environments by the OECD, the Partnership for twenty-first Century Skills and the New Zealand Ministry of Education, respectively:

Our understanding of a 'learning environment' is as an organic, holistic concept that embraces *the learning* taking place as well as the setting: an eco-system of learning that includes the activity and outcomes of the learning. It recognises that *context* is essential in the contemporary understanding of learning. (OECD, 2013, p. 22, original emphasis)

The term 'learning environment' suggests place and space – a school, a classroom, a library. And indeed, much 21st century learning takes place in physical locations like these. But in today's interconnected and technology-driven world, a learning environment can be virtual, online, remote; in other words, it doesn't have to be a place at all. Perhaps a better way to think of 21st century learning environments is as the support systems that organize the condition in which humans learn best. (http://www.p21.org/storage/documents/le_white_paper-1.pdf)

An innovative learning environment (ILE) is the complete physical, social and pedagogical context in which learning is intended to occur. Having the right property, and flexible learning spaces (FLS) in particular, is one part of creating an ILE. (http://www.education.govt.nz/school/property/state-schools/design-standards/flexible-learning-spaces/)

Albeit that ILEs are conceived as multiple and diverse—'physical, social and pedagogical'—what is common to these accounts is a 'container' view of them, emphasising their stability. Framed as 'setting', 'context', 'physical locations', 'support systems', 'property' and 'flexible learning spaces', they present as unitary ('an eco-system of learning'; 'complete physical, social and pedagogical context') and *ready made*. While ILEs are taken to give support to dynamic learning processes, they are conceived as 'outside' these processes, or as interacting with them, but not caught up *in* them: an ILE is the 'context in which learning is intended to occur'. A boundary is assumed to exist between the human world of learning (content, meaning) and the physical world of learning spaces (context, matter).

Other stories: relational views

Policy narratives of ILEs imply that *learners* learn in innovative learning spaces. But what if learning spaces participate in learning? Or if the learner and the learning space participate together such that space is not a stable structure (physical resource, facility and infrastructure) that has properties and qualities separate from learning? Massey (2005, p. 12) argues that space is 'neither a container for always-already constituted identities [21st century learners] nor a completed closure of holism ["complete physical, social and pedagogical context"]'. She urges that we recognise space as always under construction, always in the process of being made. Space is 'a product of relations-between, relations which are necessarily embedded material practices which have to be carried out' (Massey 2005, p. 9). Here, notions of learning space as a pre-existing framework in which learning unfolds give way to approaches which view it as dynamic, emergent and participatory. A relational understanding of space comes to the fore where outcomes are not determined, but open to change. This understanding of space and ILEs as spatial set-ups invites thinking and practising outside the well-established separations and divisions that currently define the learning space-education practice relationship. One can go beyond or cut through recurring questions of 'Does a learning space make a difference to learning?' and 'Does contemporary learning require renewed space?' In thinking the space-practice relationship relationally, rather than dualistically, we maintain that complexity comes into view.

The focus falls on how ILEs are materialised rather than what they signify, a point supported by the teacher's comments at the outset of the article: 'Students are certainly finding it a very social situation. ... There's not a lot of rows, and just being able to be in your own world'. Relational thinking 'troubles' the binary categories commonly adopted in the learning spaces literature.

Drawing a strong contrast between categories of traditional classroom and contemporary learning space and industrial age education and twenty-first century learning, as commonly occurs in this literature, distorts and oversimplifies these categories and disavows connections between them.

Assemblage as a conceptual frame: the role and contribution of affect

Based on interdependencies between subject and object, person and world, the concept of assemblage 'has been increasingly used to designate, not an arrangement or a state of affairs, but an ongoing process of arranging, organising or congealing how heterogeneous bodies, things or concepts come "in connection with" one another (Kennedy et al., 2013, p. 45, original emphasis). As Kennedy and her colleagues (2013, p. 46) have it, 'in contrast to its common-sense meaning, assemblage refers to complex flows, connections and becomings that emerge and disperse relationally between bodies'. In simple terms, an assemblage is 'a shifting and contingent configuration of ideas, practices and technologies that—for this very reason—is susceptible to being configured otherwise' (Anderson & Perrin, 2015, p. 4). In promoting the idea of twenty-first century learning and pedagogic practice dedicated to the use of digital and physical resources (i.e. learning spaces), ILEs are, par excellence, just such a configuration. Produced and crafted by affects (Kennedy et al., 2013, p. 47), assemblages afford attention to how intensities of feeling can gather around and be provoked by objects as evidenced in the empirical material where walls that serve to either open or close learning spaces are shown to activate affect. Affect emerges through embodied encounter (Conradson & Mckay, 2007, p. 170) with bodies taken to be organic or inorganic. Thus, in the context of studying the affective dynamics of ILEs, bodies are human bodies, learning spaces and the 'affective objects' referred to above—operable walls. And, it is in the interaction between these bodies that affective politics lies. 'Affects are political in the sense that power is an inextricable aspect of how bodies come together, move, and dwell' (Zembylas, 2016).

In a more social psychological than philosophical framing, affect is forwarded as a practice: 'affective practice is a moment of recruitment, articulation or enlistment when many complicated flows across bodies, subjectivities, relations, histories and contexts entangle and intertwine together to form just this affective moment, episode or atmosphere with its particular possible classifications' (Wetherell, 2015, p. 160). Importantly, this practice incorporates cognitive knowledge and human capacities for making meaning: it is not 'distinct from words, narratives, signification and representation' (Wetherell, McCreanor, McConville, Barnes, & le Grice, 2015, p. 59). Emphasis is placed on affective-discursive practice (Wetherell, 2015, p. 152). This said, it is acknowledged that capacities of a non-human kind should be taken into account when studying affective practice. '(T)he question is how to conceptualise emotions [and, I add affects] and space as material and cultural at the same time, as cultural-material "hybrids" (Reckwitz, 2012, p. 247, added emphasis). In considering space as material and cultural at the same time we have moved far from a received view of space and learning spaces. Taking the workings of ILEs as our focus, we bring the relational concepts of assemblage and affect to bear, towards exploring the affective-discursive dimensions of these workings and their relation with social power: who/what benefits from and who/what carries the cost of these environments.

Data and methods

Forming part of two larger projects, the empirical research involved the collection of video-based case data in a Government secondary school and photographic case data in a Catholic primary school in the Australian state of Victoria. The video-based case study was undertaken by a team led by the first author in 2012–2013, whereby 'new generation learning environments' in two Secondary and two Primary schools were purposely sampled and activities within them filmed. Further to the observational data, interviews (16 altogether) were conducted with school leaders, teachers and students in these schools. The aim of the project was to investigate the nature of the teaching and

learning afforded by newly designed learning spaces. The photographic study of four Victorian Catholic schools, two Secondary and two Primary, was undertaken between 2014 and 2016 by the second author for her PhD research. This second study takes the form of a policy sociology guided by the question, 'How and in what ways do policies influence pedagogic practices in New Generation Learning Environments?'

Given limitations of space in this article, interview data only are worked. Our accounts of the empirical material are less concerned with what works in ILEs; rather, their focus is on their 'workings' as assemblages of relations, and most particularly, affective practices and relations. Reflecting analytic methods underwriting materialist inquiry, data are more encountered than read and the encounter with them is experimental: 'the researcher does not know in advance what onto-epistemological knowledge will emerge from the experimental mix of concepts, emotions, bodies, images and affects' (Davies, 2014, p. 734). Taking affective practice to be a 'flowing assemblage' (Wetherell, 2013, p. 236), we attend to encounters exuding affective force/flow. We 'focus on the patterns of relations—not the entities themselves, but the patterns within which they are arranged with each other' (Puar, 2012, pp. 60–61). And, on how affective practices give new capacities to these entities (people, bodies, spaces, ILEs).

Affective practice at work in ILEs

Affective encounter 1: 'The wall is closed, why is the wall closed?'

The school from which the data in this vignette are drawn is a large and culturally diverse secondary government school structured along the lines of a House model with each House being a stand-alone ILE. Students are drawn from different Year levels and grouped together as a House. Tasked with leading a comprehensive and 'high-stakes' change to this model, the Principal self-describes her Principalship as 'about how you embed and sustain that change'. She attests to the challenges that the new learning spaces present to the teaching staff and, by extension, to her change leadership practices, in this way:

But what was happening when we first moved into the spaces was a lot of the teachers teaching in the junior (section) in the collaborative model thought 'beauty'– if they're in that space, they can close the operable wall, I can be with my 25 on this side, they can be with their 25 on the other, and the third teacher can run in between, and then I don't have to challenge my practice because it will feel like a classroom. And so one of the things I had to do and I constantly have to do is challenge them, and challenge it in a really direct way, which is simply go in and say – 'the wall is closed, why is the wall closed?' ... You challenge that based on the vision and the reasons for the change in the first place. 'So you've closed the doors – why have you done that, because at (this) school, the understanding is this because we believe this – I need you to open the doors, and let's sit down and talk about how you could use the space so that the students can learn effectively and we can deal with some of the concerns that you have'.

Following the embodied movements of these data, both the Principal and her staff are caught up in intensities of feeling regarding how the new learning environment is defined and 'done'. From the Principal's point of view, the ILE must mean in a particular way: be 'based on the vision and the reasons for the change in the first place'. Oriented to achieving effective learning, discourses of challenge, change, collaboration and architectural openness predominate. The agenda being set concerns detaching the teaching staff from what the Principal calls 'their little box at the front' and attaching them to the ILE in which it is anticipated they will collaborate and innovate and not teach 'in the same way'. This agenda is mobilised both discursively (the discourse of effective teaching being dominant) and affectively. An affective assemblage forms comprising, at least: change agenda–vision for the school– teacher challenge to this vision via closed operable wall–Principal frustration. The closed operable wall incites Principal frustration and intensity of feeling evident in: 'So you've closed the doors – why have you done that ... I need you to open the doors'. In proximity

to the offending closed wall and through forcefully expressing the need to 'open the doors', 'there is an intensification of the body's relation to itself (one definition of affect)' (Puar, 2012, p. 60).

The change agenda that this Principal is setting concerns movement from teaching in a 'little box' to the *collaborative learning model* which involves a significantly changed role for teachers and students such that teachers team and plan together and students engage in collaborative learning and 'co-instruction'. This agenda conforms broadly to the terms of the received view of learning spaces as 'support systems that organise the condition in which humans learn best' (http://www.p21.org/ storage/documents/le_white_paper-1.pdf), that is, learn actively and collaboratively. Learning spaces are forwarded as physical and symbolic entities that support, resource, facilitate and *fix* a particular approach to staff and student learning: 'our buildings are so strategic to the vision, because the House is not just a space, it's also a structure – it's a learning model'.

Yet, as a member of staff comments, this agenda is highly contestable:

I always see in the school a bit of a tension between it being ... there's still this, I suppose, this group of teachers, and pretty much everybody as well, who really want to do teacher-led stuff. They believe in direct instruction, and learning directly from the teachers, which has its place absolutely. And then there's the alternative view which is – alright, I'm just going to do two minutes at the start, I'm going to give them the work, and then you go and do it. And I think both are not okay. It's got to be somewhere in the middle. I've seen with the two minute sort of instruction and you go and do it, and you can sit anywhere, and you can sit there and there and there and there and that sort of thing – it can lead to unfocused work, that sort of thing. It's great for independent learners, but not everybody is at this stage independent.

The teacher in the above quote claimed that the bulk of the teachers 'really want to do teacher-led stuff'. In what can be called the Principalship ILE assemblage, teacher-led stuff is associated with class- room teaching and with the tried and true, precluding innovation: 'I don't have to challenge my practice because it will feel like a classroom'. And while it is acknowledged that certain learning purposes require teacher-led teaching and instructional spaces in which this teaching can be undertaken, in effect, teacher-led learning has no seat at the effective learning table: 'So we've gone back again to that why, and what does effective senior studies' learning look like, and really challenging that notion that them sitting in lines and being fed information is effective learning'.

We propose that a discourse of teacher deficit is playing out in these data with little recognition given of how *affective attachments* to pedagogic practices and types of teaching-learning spaces can form and how affects can constitute teachers' capacities to teach. As Watkins (2010, p. 271) has it, the 'pedagogic relation involves a process of mutual recognition realised as affective transactions that at one and the same time can cultivate the desire to learn and the desire to teach'. Something of this relation is reflected in another teacher's comment at interview:

We're told not to close the doors as often as we possibly can ... you can run fantastic lessons with the doors open between the three of you, but when ... you want to get particular students in particular groups to work and talk together, sometimes it's peer coaching, so you set up the groups so that you've got sort of the stronger sort of abilities together, and do it on purpose, and you need that quiet discussion sort of so that they can drag the tables aside and sit together, talk, work through whatever has been given to them. And so I think this sort of blanket idea of no closing the doors is a little bit misquided because it doesn't allow for the flexibility that flexible spaces should.

Affective transactions assume the form of setting up groups and dragging the tables aside so that students can sit together, talk and work; in short, closely connect. The teacher's desire to teach in a particular way, here through quiet discussion—the right affective atmosphere?—brings a reassembled learning environment into effect. Teaching desire (affect) trumps the 'blanket idea of no closing the doors'. 'Affect operates as a dynamic of desire in any assemblage' (Colman, 2010, p. 13). The teacher who 'always see(s) in the school a bit of a tension' provides a strong sense of how spaces themselves transact affects and, and as he sees it, affectively advantage some students over others, with possible implications for learning outcomes:

Students are certainly finding it a very social situation. I mean they're pretty much always close to and opposite another person. There's very little sort of opportunity to sit anywhere by yourself. The whole place is like a fish- bowl, you know there's glass everywhere. So there's little opportunity to sit by yourself. There's not a lot of rows, and just being able to be in your own world. I think there's an argument which says that the spaces are set up for extroverts. In fact you know the whole school is probably set up for the extroverts, not so much for the introvert because you're very much thrown in. If you don't like a little bit of noise, or if you don't like, you know, sitting with other people and being able to chat, then probably (they're) not the best of spaces. But certainly there is a lot of teamwork that gets done.

The ILE is a *materialising* entity. On the one hand, it presents as a challenge to the traditional class- room and on the other as a fishbowl, befitting extroverts. In association with its advocates and its sceptics, it generates contests over the worth of particular outcomes (e.g. student-centred learning; 'teacher-led stuff') and ultimately over the ontology of the ILE: what ILE assemblage will prevail.

Affective encounter 2: '... there's no walls blocking ...'

This second case example traces the ILE assemblage through affective-discursive practices of teachers and students in the early years of schooling. The data being worked are part of paired interviews undertaken by the second author of this article with two early career, Year 1/2 teachers and two of their students, Sarah and John (both 8 years old), at a medium-sized Catholic primary school. Teaching and learning practices and the infrastructural arrangements at this school are organised in quite a complex way as the six teachers work collaboratively to mix the 150 students in groupings that move and reconfigure throughout the open learning environment during the school day. These six-eight year old children confidently negotiate moving to different teachers for different activities, and only short periods are spent with their home group teacher each day. These practices are promoted by the school leaders as the most effective way of making the most of the affordances of the spaces and the teacher expertise available to personalise learning. And, as with the secondary school in Affective Encounter 1, these practices are held in opposition to the notion of a single teacher with her 25 students in a closed classroom.

Processes of change, such as this school is undertaking to bring about an ILE, involve school leaders setting the change agenda and working to engage the interests of teachers to impose and stabilise teacher and student subjectivities in line with policy guidelines—that of 'contemporary teacher' (Catholic Education Office, Melbourne [CEOM], 2009) and '21st Century learner' (Dumont, Istance, & Benavides, 2010). The new school infrastructure in which there are no doors also acts – it is an agentic part of the materiality of the learning environment that extracts teachers and students from their existing assemblages. In these change processes, teachers and students become implicated actors—that is, they are caught between multiple, sometimes competing, assemblages. This becomes evident in the teacher interview when their ILE practices are revealed as fluid and constantly changing; as one teacher commented: '... we need to be constantly trying new things'. The teachers' affective practices involve a degree of uncertainty about which way is best: 'And we don't know what the answer is ... we're not too sure. So that's something that we really find a challenge. We're not too sure which way we're meant to go with that'. The struggle and uncertainty that the teachers feel is intense as their experiences and beliefs about what good teaching is are unsettled and their practices change. But what about the students in these change processes?

The interview data bring to light different intensities of feeling, different learner identities, in Sarah's and John's ILE assemblages, provoked by the learning environment. Even though they are still very young (this is their third year at school), they have experienced different learning environments and pedagogic practices, and they bring family influences and their own particular learning characteristics to the ILE assemblage. Early in the interview, Sarah expressed her love of school ... 'it's like my second home because everyone looks after me and it's really comfortable everywhere'. This contrasts with John, from a non-English speaking background, who utilises the photographs taken of the 1/2 Learning Area to show the reading corner where he likes to read his

books, but also to point out the most uncomfortable places, misspelled signs and children hiding between shelves.

Intense affective responses emerge when the children are asked to imagine how they would feel in a square room with a closed door, where they wouldn't be able to see children from other classes. Immediately John responds:

I'd feel better because it's too noisy then if you're trying to hear ... if your teacher's trying to talk to you about an important thing, and the kids from the other classes around, and there's no walls blocking, it's going to make it louder for you to hear, and you think you hear something else what they said ... you'll think you'll do something wrong, and you'll be in trouble.

John then enlists his whole family, human and nonhuman, in support: 'And my whole family thinks the way that I think ... and so do my dad and my sister and my mum ... and my cat and my dog'. John's student identity is strongly influenced by the cultural capital he brings, most particularly via his family (e.g. investment in academic education). Constituted and shaped by these interconnections with bodies, objects and things, human and nonhuman, in this moment John is becoming a learner differently to the way ILE policies, new infrastructural arrangements and school leaders work to inscribe him. His affective practices resist the openness, noise and flexibility of the ILE as John performs his identity as a learner who needs to hear what the teacher is saying and do the right thing. Simultaneously, power is enacted through John's strong use of 'I' in 'I'd feel better'—understood here as 'felt thought' (Mulcahy & Witcomb, in press) where what is expressed is critically inflected. The kind of learning environment that John prefers can be characterised as the *instructional* learning environment where the teacher is central, spatial boundaries allow students like John to hear what is said and to do their work, and where bodies are disciplined.

Through focusing on affective-discursive practices, we gain a sense of other bodily states— 'other' bodies become visible to us (Wetherell, 2012). Indeed, John and Sarah become 'other' to each other in affective flows that figure on their faces and through their voices. Sarah also becomes caught up in the encounter, resisting the notion of a classroom with a closed door where she can't see her friends: 'Well to me it's not really [noisy], and I like it now when there's really not much walls, so you can't see them because you can always see people smiling, and other really nice teachers'. For Sarah the ILE is a place of social significance where she can learn with her friends and can see lots of people, particularly the teachers. Power is enacted in Sarah's disagreement with John, through her invocation of 'I'—'I like it now ...'—and she works to re-assemble the learning environment as a social ILE. The social ILE is consistent with ILE policies and the new infrastructural arrangements and characterised by student-centred- ness, collaborative practices, flexibility and visibility. However, assemblages are neither one thing nor another—rather they are incredibly fluid and uncertain, morphing and changing in multiple practices. Through this case story, we can see how teachers and learners are not socially constructed as stable and unitary identities, rather, they are continually constituted in affective assemblages of interconnected bodies, ideas and things of the ILE assemblage and beyond, including social institutions such as school and family. And, learning environments are not simply physical spaces for human activity but are continually constituted in interconnecting material-discursive practices. Despite emerging sociomaterial research revealing the complexity and fluidity of educational practices in new learning spaces (Mulcahy, 2015, 2016), the instructional ILE assemblage tends to be portrayed in policy discourses as 'closed' and 'traditional', and devalued in the current milieu of twenty-first Century learning (evident in, for example, Department of Education and Early Childhood Development, 2009a; OECD, 2006). What such policy frameworks do not give strong accounts of, however, is how twenty-first Century learning competencies that foreground skills of independence, collaboration and individual responsibility, and innovative infrastructural arrangements that focus up openness and flexibility, work for different learners, and whether, how, and in what ways the ILE may advantage some students over others.

Affective practice and its politics

We attempted in the vignettes to bring into view the complex relations between the affectivediscursive and social power. In so doing, we gave particular attention to affect inasmuch as it 'maps the micro- political relations that constitute the beginnings of social change' (Hickey-Moody & Crowley, 2010, p. 401). Affect matters. Thus, in proximity to the wall, the language used by the Principal in Encounter 1 operates as affect towards propelling teachers to comply with the 'no closing the doors' policy and consolidating a particular version of learning environment, that is, the ILE. 'Affective-discursive practices construct relations of proximity and distance, affiliation and detachment, and inclusion and exclusion' (Wetherell et al., 2015, p. 58). Yet, the empirical material demonstrates how these constructed relations can be reconstructed towards challenging the normative power of the Principalship and the policies that subtend it, as evidenced in the teacher comment: 'And so I think this sort of blanket idea of no closing the doors is a little bit misguided'. We propose that affective attachments that teachers have to instructional practice and to learning environments other than ILEs need to be acknowledged, rather than represented as teacher resistance to change or failure to comply with agreed policy. The privileging of one form of affective response (e.g. teacher resistance or discomfort with change) as common can easily become the hallmark of exclusive ILEs. The discourse of innovation being popularised presently by governments in Australia strives to singularise the way that learning environments work and can mask the multiplicity of these environments as enacted phenomena. As Law has it (2004, p. 162), 'multiplicity like difference (is) the simultaneous enactment of objects in different practices, when those objects ... are said to be the same'. Reconsidering Encounter 2, the ILE that John inhabits, albeit to all intents and purposes the same as Sarah's, is in reality markedly different. It is a 'failed' ILE assemblage because it does not provide for the learner identity that he and his family have come to expect of school.

Taking a lead from the empirical material, and as Weaver and Snaza (2016, p. 4) propose, we need as researchers to 'take the risk of attuning ourselves to the bodies, encounters, networks, and affects that have always already made the world what it is, but which have been disavowed and ignored by humanist, anthropocentric, methodocentric science'. In other words, attune ourselves to the idea that the physical world and the human world do not exist in 'fundamentally discrete ontological registers' (Wolfe, 2010, p. 219). As the data demonstrate, space and learning are made with practice and through negotiations of various kinds (social, material, affective): 'if your teacher's trying to talk to you about an important thing, ... and there's no walls blocking, ... you think you hear something else'. Multiple practices of space play out in the data, both physical and 'more than physical' (e.g. affective space in which 'you can always see people smiling, and other really nice teachers'), yet this ontological multiplicity is disavowed in the pursuit of learning spaces, defined 'officially' as material resources for learning (OECD, 2013).

While spatial metaphors lead in the 'official' literature, they are glossed in such a way as to have the concept and practice of space appear singular, neutral and apolitical. In consequence, relations of space and power inherent in the infrastructural shift to ILEs drop from view. As does the idea that ILEs embed a particular view of learning space and of educational practice, its practitioners and its learners. A more inclusive understanding of the spaces of learning and of teaching and learning in contemporary schools would provide for a reinvigorated hybrid of 'no walls blocking' and 'some/all walls blocking', 'no closing the doors' and 'closing some/all doors' towards considering and engaging with the complex relations of affect and power to which they are attached.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Dianne Mulcahy is a senior lecturer in the Melbourne Graduate School of Education at the University of Melbourne, Melbourne, Australia. Her published work in Education concerns the policy and practice of educators' professional formation and development. Her recent research activity has centred on capturing the complexity of learning within new generation learning environments, with particular attention to the materiality of this learning, including its embodied and affective dimensions. Her publications include over 50 refereed journal articles and conference papers, 3 monographs and 7 book chapters.

Caroline Morrison is a PhD candidate at the Melbourne Graduate School of Education, The University of Melbourne. She is a primary teacher having taught in the Catholic sector in Melbourne for seventeen years before taking up positions of Deputy Principal and Principal for the past ten years. Taking new generation learning environments (NGLEs) to be policy artefacts, her Doctoral research involves an in-depth, qualitative case study exploring the experience and practices of leaders, teachers and students within NGLEs in three Melbourne Catholic schools. Her study draws on tools and concepts from actor-network theory and Deleuzean assemblage theory to stage empirical accounts of the politics and power relations that are playing out in the social, material and discursive relations that comprise NGLEs.

ORCID

Dianne Mulcahy http://orcid.org/0000-0002-1027-2152

References

- Anderson, K., & Perrin, C. (2015). New materialism and the stuff of humanism. *Australian Humanities Review*, 58, 1–15
- Boddington, A., & Boys, J. (Eds.). (2011). *Re-shaping learning: A critical reader The future of learning spaces in post-compulsory education*. Rotterdam: Sense.
- Byers, T., Imms, W., & Hartnell-Young, E. (2014). Making the case for space: The effect of learning spaces on teaching and learning. *Curriculum and Teaching*, 29, 5–19.
- Catholic Education Office, Melbourne. (2009). Contemporary learning 2009–2013. Melbourne: Author.
- Clarke, A., & Montini, T. (1993). The many faces of RU486: Tales of situated knowledges and technological contestations. *Science, Technology, & Human Values, 18*, 42–78.
- Colman, F. (2010). Affect. In A. Parr (Ed.), *The Deleuze dictionary* (2nd ed., pp. 11–14). Edinburgh: Edinburgh UP. Conradson, D., & Mckay, D. (2007). Translocal subjectivities: Mobility, connection, emotion. *Mobilities*, 2, 167–174.
- Davies, B. (2014). Reading anger in early childhood intra-actions: A diffractive analysis. *Qualitative Inquiry, 20,* 734–741.
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia* (B. Massumi, Trans.). London: Continuum.
- Department of Education and Early Childhood Development. (2009a). *Building schools in the 21st century and current thinking about learning for a lifetime*. Melbourne: The State Government of Victoria.
- Department of Education and Early Childhood Development. (2009b). *Pedagogy and space: Transforming learning through innovation*. Melbourne: State of Victoria.
- Dumont, H., Istance, D., & Benavides, F. (2010). *The nature of learning: Using research to inspire practice*. Paris: OECD.
- Hickey-Moody, A., & Crowley, V. (2010). Disability matters: Pedagogy, media and affect. *Discourse: Studies in the Cultural Politics of Education*, *31*, 399–409.
- Kennedy, R., Zapasnik, J., McCann, H., & Bruce, M. (2013). All those little machines: Assemblage as transformative theory. *Australian Humanities Review*, *55*, 45–66.
- Latour, B. (2005). Reassembling the social: An introduction to actor-network-theory. Oxford: Oxford University Press
- Law, J. (2004). After method: Mess in social science research. London: Routledge.
- Law, J. (2011). *Heterogeneous engineering and tinkering*. Retrieved from http://www.heterogeneities.net/publications/Law2011HeterogeneousEngineeringAndTinkering.pdf

- Leander, K. M., Phillips, N. C., & Taylor, K. H. (2010). The changing social spaces of learning: Mapping new mobilities. *Review of Research in Education*, *34*, 329–394.
- Massey, D. (2005). For space. London: Sage.
- McGregor, J. (2003). Making spaces: Teacher workplace topologies. *Pedagogy, Culture & Society, 11*, 353–377. McGregor, J. (2004). Space power and the classroom. *Forum, 46*, 13–18.
- Ministerial Council on Education Employment Training and Youth Affairs (MYCEETYA). (2008). *Learning spaces framework: Learning in an online world*. Carlton South.
- Mulcahy, D. (2015). Re/assembling spaces of learning in Victorian government schools: Policy enactments, pedagogic encounters and micropolitics. *Discourse: Studies in the Cultural Politics of Education, 36*, 500–514. doi:10.1080/015963 06.2014.978616
- Mulcahy, D. (2016). Policy matters: De/re/territorialising spaces of learning in Victorian government schools. *Journal of Education Policy, 31*, 81–97. doi:10.1080/02680939.2015.1099077
- Mulcahy, D., & Witcomb, A. (in press). Affective practices of learning at the museum: Children's critical encounters with the past. In L. Smith & M. Wetherell (Eds.), *Emotion, affective practices and the past in the present*. Routledge.
- Organisation for Economic Co-operation and Development. (2006). 21st century learning environments. Paris: Author.
- Organisation for Economic Co-operation and Development. (2013). *Innovative learning environments*. Paris: Author.
- Park, E. L., & Choi, B. K. (2014). Transformation of classroom spaces: Traditional versus active learning classroom in colleges. *Higher Education*, *68*, 749–771.
- Puar, J. K. (2012). 'I would rather be a cyborg than a goddess': Becoming-intersectional in assemblage theory. *Philosophia*, *2*, 49–66.
- Reckwitz, A. (2012). Affective spaces: A praxeological outlook. Rethinking History, 16, 241–258.
- Veloso, L., Duarte, A., & Marques, J. (2013). Changing education through the transformation of learning spaces: Analysis of the secondary schools modernisation programme in Portugal. Paper presented at the The European Conference on Education 2013. Retrieved from http://iafor.org/archives/offprints/ece2013-offprints/ECE2013_0152.pdf
- Watkins, M. (2010). Desiring recognition, accumulating affect. In M. Gregg & G. J. Seigworth (Eds.), *The affect theory reader* (pp. 269–285). Durham, NC: Duke University Press.
- Weaver, J. A., & Snaza, N. (2016). Against methodocentrism in educational research. *Educational Philosophy and Theory*, 1–11. doi:10.1080/00131857.2016.1140015
- Wetherell, M. (2012). Affect and emotion: A new social science understanding. Los Angeles, CA: Sage.
- Wetherell, M. (2013). Feeling rules, atmospheres and affective practice: Some reflections on the analysis of emotional episodes. In P. Aggleton & C. Maxwell (Eds.), *Privilege, agency and affect: Understanding the production and effects of action* (pp. 221–239). Houndmills: Palgrave Macmillan.
- Wetherell, M. (2015). Trends in the turn to affect: A social psychological critique. *Body & Society, 21*, 139–166. Wetherell, M., McCreanor, T., McConville, A., Barnes, H. M., & le Grice, J. (2015). Settling space and covering the nation: Some conceptual considerations in analysing affect and discourse. *Emotion, Space and Society, 16*, 56–64.
- Wolfe, C. (2010). What is posthumanism?. Minneapolis: University of Minnesota Press.
- Zembylas, M. (2016). Making sense of the complex entanglement between emotion and pedagogy: Contributions of the affective turn. *Cultural Studies of Science Education*, *11*, 539–550. doi:10.1007/s11422-014-9623-y