

I CAN SEE CLEARLY NOW THE WALL IS GONE: SITUATED PROFESSIONAL LEARNING IN A COLLABORATIVE INNOVATIVE LEARNING ENVIRONMENT

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ABSTRACT

The development of effective collaborative teacher practice within Innovative Learning Environments (ILEs) in primary schools forms a critical component that might underpin how successfully they operate. For many teachers, this shift into new and shared spatial settings may well coincide with increased levels of openness, visibility, deprivitisation of practice and opportunity to learn from their colleagues. Physical proximity, however, does not guarantee this learning, although professional exposure is perhaps more inherently assured. In such an environment, where does the difference lie between seeing and observing? And what role does feedback play between colleagues? 'What's working' can perhaps therefore be constructed in terms of predominant cultural conditions, shared understandings, and teachers' capacities to 'be comfortable being uncomfortable'.

This article draws on material from a wider study on teacher collaboration in ILE, and presents findings from data conducted in one of the New Zealand primary schools case study sites. It utilises data collected through interviews with principals and teachers, and observations of teacher teams practicing in ILEs. It reflects the notion that while spatial proximity may well present opportunities for teachers, it also presents complex challenges at the professional, social, and cognitive level.

KEYWORDS: COLLABORATIVE TEACHER PRACTICE, MODERN TEACHING ENVIRONMENTS, SPATIAL PROXIMITY.

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INTRODUCTION

Considering teacher collaboration spatially in primary schools, typically has presented something of an oxymoron. Traditional classroom settings have perhaps remained true to their maternal brief, creating nested sets of compartmentalised relationships between teachers and students. The four walls of classroom ‘built pedagogy’ (Monahan, 2002), proliferated, have in turn optimised settings for high levels of professional autonomy within relatively isolated physical domains (DuFour, 2011; Elmore, 2012; Flinders, 1988; Lortie, 1975). Consequently, the traditional place of primary school professional practice has long been regarded as relatively private, moderately invisible, and one that encourages a level of individual teacher territorialisation (Little, 1982). All in all, not one that has necessarily been conducive to effective collaboration. Accordingly, collaboration and the professional learning that accompanies it, has been frequently noted as ‘visited’ activities - activities that teachers have left their individual classrooms to engage in (Forte & Flores, 2013; McGregor, 2003).

A shift into many ILEs potentially changes this. The adoption of design typologies (Dovey & Fisher, 2014) that afford up-scaling of student cohorts and co-location of teachers, along with the provision of pedagogically purposeful interiors, create fresh professional socio-spatial assemblages. In doing so, they challenge the traditional divide between public and private teacher practice, relationships with colleagues, as well as bringing a level of accessibility and the immediacy to learn from one another. Situated professional learning, a constituent of ILEs, has often formed a rationale for spatial change within primary schools (OECD, 2013).

This is not to say that individual and private practice should be construed as a negative virtue. While privacy may conjure notions of secrecy with its inherently undesirable and subversive undertones, there are countless examples of highly effective and innovative practices taking place in traditional spaces (Hattie, 2009). Spatially, however, as Clandinin and Connelly (1996) note, individual teachers’ classrooms have been frequently viewed as relatively safe professional spaces, located at the junction of theory and practice, an area of professional knowledge where “teachers are free to live stories of practice” (p. 25). In essence, teachers have been able to judiciously select what to share with colleagues; what Levine and Marcus (2010) refer to as our ‘face’ of practice.

VISIBILITY

The theme of professional visibility tracks across the literature terrain of contemporary learning environments; whether explicitly through architectural representations of space or implicitly through emerging understandings of contemporaneously relevant practice, changing pedagogy, and the nature of teacher collaboration. Frequently, it is underpinned by a systemic intention to create deprivatised and transparent practice (Fullan & Langworthy, 2014; Hattie, 2012). Corresponding parallel spatial innovations on one hand, therefore, send a message about the pedagogical intentionality of the space in terms of ‘opening’ practice (Hayes, 2006). Here, teaching and learning is ‘visible’, “exposed to the witness and critique of others” (Campbell, Saltmarsh, Chapman, & Drew, 2013, p. 212). Their design is considered symbolic of increased ‘openness’, in providing the antithesis of ‘single-cell’ classrooms (Horne, 2004).

Increased visibility within schools and between teachers has been viewed as a desirable affordance of new learning environments (Nair, Fielding, & Lackney, 2009; OECD, 2013). Consequently, it has often been implemented as a design element in many ILEs, often observed in the reduction of enclosed ‘classroom’ spaces and with the provision of internal glazing (Gislason, 2007). Visibility has also been noted as a mechanism that impacts on teaching practice in creating increased levels of scrutiny (Alterator & Deed, 2013). In assessing this, Alterator and Deed (2013) noted teacher concerns over reduced privacy, an

increased pressure to perform, as well as a sense of “being judged”(p. 322). Additionally, Prain et al. (2014) indicated that some teachers viewed this as an unwelcome change, due to perceived distractions and the idea that “visibility inhibited their usual personas with students” (p. 201).

PROFESSIONAL LEARNING

Increased visibility resulting from a move into ILEs with collaborative teacher practice appears to manifest in traditionally ensconced practice emerging into the public domain. And with this, the belief that the enlarged spatial setting will in turn provide a context for meaningful professional learning through observation of colleagues’ practice (OECD, 2013). Prain et al. (2014), noted that in ILEs characterised by larger open spaces and internal glazing, enhanced visibility gave rise to an increased capacity for teachers to observe through “vistaed visibility (or multiple framed visual perspectives)” that “acted as enablers for teachers to consider new ways to imagine and enact curricula” (p. 198). Additionally, Alterator and Deed (2013) identified that increased visibility afforded by closer proximity and open environments led to increased informal exchanges between teachers. Similarly, in the Campbell et al. (2013) case study, teachers reported a level of ‘incidental professional learning’ often mimicking or appropriating techniques and ideas. In addition, it was easier for teachers to see how experienced colleagues handled particular learning and behavioural situations with students. For Campbell et al. (2013), this meant that “new cultures of practice emerged that came to see teaching as a shared practice”. Here, professional learning is viewed as a reciprocal group knowledge production activity, characteristic of Lave’s (1991) community of practice, where teachers engage in joint problem solving with a shared focus. However, as Stoll, Bolam, McMahon, Wallace, and Thomas (2006) identify, undertaking learning with colleagues can entail a degree of risk.

Teachers are unlikely to participate in classroom observation and feedback, mentoring partnerships, discussion about pedagogical issues, curriculum innovation, unless they feel safe. Consequently, colleagues need to establish high levels of relational trust (Bryk & Schneider, 2003) between teachers working collaboratively - not always an easy goal to achieve when commonly collaborative teacher teams are constructed externally in a ‘contrived’ manner (Hargreaves, 1994). Hence, within ILEs where ‘deprivitisation’ is viewed as a fundamental motivation behind a shift towards new generation spaces through its capacity to expose and make visible teacher practice, attention is needed to the way this is enacted and mediated through cultural norms (Campbell et al., 2013).

OBSERVATION AND ‘SEEING’

Observation of teacher practice has become a characteristic of successful Professional Learning Communities when combined with reflective inquiry, openness and mutual respect (Bolam, McMahon, Stoll, Thomas, & Wallace, 2005). Furthermore, observation coupled with a feedback cycle that leads to ‘double-loop learning’ impacts on embedded mental-models (Argyris, 1976). In doing so, those that challenge incumbent teacher ‘theories of practice’ (Schon, 1983) are, as Hattie (2012) notes, more likely to lead to a sustained change in the way that teachers understand their practice. In this context, observation is closely associated with being planned, predetermined, and negotiated; at times associated with coaching practices, but also with appraisal and professional standards. In contrast, incidental learning enabled simply by being physically ‘present’, is unplanned, less predetermined and non-negotiated. For teachers within collaborative ILEs, much of the professional learning is encountered in this manner, although as Campbell et al. (2013) note it does not automatically lead to the development of effective learning communities, although, it may develop heightened levels of self-awareness through the act of

observing others (Gebhard, 1999). However, the immediacy and availability of access to a colleague's practice may also present tension in terms of the role, and timing of relevant discussion and feedback, with individual teachers responsible for making decisions or seeking permission to discuss 'what is seen'.

SPATIAL PRACTICES

Here, the distinction between observation and 'seeing' presents an interesting terrain for teachers to navigate through collaborative ILEs. Prain et al. (2014) noted that although new built environments acted as a catalyst for change, they did not automatically alter pedagogy or teacher behaviour. However, manifesting themselves in self-determined 'anti-scrutiny' practices, teachers' efforts to avoid unwanted attention were well documented amongst accounts of resistance to open-plan classroom settings (Tanner & Lackney, 2006). More recently, as Saltmarsh, Chapman, Campbell, and Drew (2014) observed, "teachers had strategically positioned bookcases and other items of furniture to block the views of colleagues who were disliked or mistrusted, and to shield themselves from unwanted scrutiny" (p. 8)(p. 8)(p. 8)(p. 8)(p. 8). Spatially and pedagogically, this resulted in an effective co-habitation of teachers within space, rather than collaboration.

Notably, from a Foucaultian perspective, visibility or the privileging of visibility of one party over another, gives rise to a potential (and possibly intentional) power imbalance (Foucault, 1977). Although, historically, designs of school buildings have afforded passive surveillance over children (Dudek, 2000), many contemporary ILE teachers are as observable as the children. In addition, Prain et al. (2014) noted that a desire for transparency may create a sense of "unwelcome monitorial panoptic control over teacher behaviour in open settings" (p. 201). The extent to which professional exposure then becomes interpreted as 'availability to be observed', remains a feature that teachers will have to navigate and negotiate their way through, as well as to spatialise into an everyday practice (de Certeau, 1984).

METHODOLOGY

I illustrate some of the emerging findings from a three-phase study investigating the interrelationship between teacher collaboration and ILE. The first phase consisted of interviews with selected educational leaders across New Zealand to identify key themes as well as potential research sites. Subsequently, a set of snapshot case studies were conducted in six primary schools, with selection based on spatial settings, evolution of collaborative practices and recommendations from key informants. This built on the notion of Reputational Site Selection (Goetz & LeCompte, 1984; LeCompte & Schensul, 2010), as well as the practice of identifying and examining practice in exemplar learning environments (Blackmore et al., 2010; OECD, 2013). Data was collected through observations, semi-structured interviews with principals, and focus groups of teachers and students. Three of the schools were then identified for in-depth case studies (Stake, 1995), with data collected through field journal observations, interviews and documentation. Data was analysed using thematic narrative analysis (Riessman, 2008). The current data was gathered from one of the Phase 3 sites, Parkside Primary School.

CASE-STUDY SITE

Parkside Primary is a century old, Year 1-8 semi-rural primary school on the urban periphery, in a region that has seen major rebuilding following the 2010 and 2011 earthquakes that rendered existing classrooms unusable. The newly occupied ILE that formed the site of inquiry was home to approximately 140 students (Year 2 and 3) and five teachers. They were grouped in a 2 and a 3 teacher split across two large spaces in adjacent ends of the building, connected by a set of glass doors. Each space contained a central open area, surrounded by several smaller and larger breakout rooms. Between the two spaces

was an additional room, accessible from both sides, as well as a shared teacher workspace. Each teacher had responsibility for a 'class group' of 25-29 students with opportunities taken to group in alternate ways. The team had invested significant work into establishing norms around collaborative practice and processes during the transition from traditional 'single-cell' environments. Except for one of the teachers' team, a second year 'beginning teacher', all others had been staff members for many years.

OBSERVING AND 'SEEING'

The spatial settings offered by the recently occupied ILE were seen by participants as more in tune with contemporary requirements, as well as playing a significant role in providing good models of learning and teaching practice. Teachers and leaders viewed enhanced collaboration as a positive step towards deprivatising practice in terms of professional growth, accountability, and an opportunity to share good practice. But the transitional stage from the relatively private realm of individually 'owned' classrooms to a shared space was reported to be a paradigm shift in thinking and practice by most teachers:

"We've always been the king of our own castle, and doing our own thing. And not seeing many other people doing what we do, because you're in there on your own." (Danielle)

Consequently, it was acknowledged that the inhabitation of the new space constituted a significant departure from traditional spatial practices and therefore presented attendant issues. Visibility was one of these issues. From the data, examples of how professional visibility altered or steered practice emerged. Contrasted with a classroom spatial setting, where teachers largely mediated what was seen, and by whom, there was a broad recognition that practice was now in the public domain. Noticeably, *public* was often appropriated as an adult-adult concept, generally exclusive of children. Accordingly, teachers' concerns over the nature of their practice were frequently couched in terms of concerns over perceived quality of their own performance. For some teachers, this initial 'fear' prompted by a heightened level of professional exposure, had been significant in manifesting itself in self-questioning. As Lucy explained:

"We weren't used to people observing us. We always got worried. Are they doing this? Are they doing that? Now it's just such a natural thing."

Some teachers were less comfortable with this, particularly when they regarded themselves as early in the stages of learning their craft. Danielle, a second-year teacher, remarked that although she recognised the ideal collaborative teaching approaches and appreciated having the support of others around, certainly in the initial months, she felt a heightened sense of nervousness when colleagues were present. As she reflected, "I think it's just the feeling of having them there watching me. It's not the children, it's the teachers, and it's taken me a while to realise that". For Danielle, the occasions that caused concern were when she was leading learning with a larger cohort of students (approximately 80). Here, the notion of mistake making and 'maintaining face' in view of colleagues was a determining factor; "I don't know, I think I'm afraid of probably making mistakes in front of teachers". For Mary, her more experienced colleague, although "being exposed as teachers" had been an initial concern, she concluded that now "I feel comfortable in front of the team".

Although teachers noted that they had not engaged in much formal observation, informal observations and incidental learning had been prevalent. Teachers acknowledged multiple examples of what they had incidentally seen occurring, and consequently, how their own practice as well as pedagogical content knowledge had changed. As Lucy commented "there's just a lot of development all the time, and it could just be that you just spot someone doing something". Specifically, teachers cited that this caused them to reflect on their own practice. Lucy continued:

"So, Alison might say something, and then she'll try it and I'll see what she's doing and say oh that's great, but you've done it in a different way and I really like that way. So, then I implement that in my programme."

At times, the gap between observation and adoption was recognised to be very brief, reminiscent of Campbell's (2013) mimicked and appropriated practices. As Lucy noted:

"I was sitting over there and we were teaching a similar thing about vowel sounds but to different ability levels, and I saw Alison doing something, and thought, oh that looks good, I'm going to steal that idea, and just did it right there, and it worked with my kids. Great, it was just something that I hadn't thought of doing."

The relative openness that the ILE afforded, offered increased visibility both across space (the room) and through space (glass). Furthermore, the central open space was understood to potentially offer flexibility to create particular learning settings through the provision and layout of furniture. At Parkside Primary, the model of teachers adopting particular placements within this open central area, particularly for use as their 'home-base', was prevalent. In doing so, the placement of furniture could either intentionally or not, have created opportunities to be seen, or as Saltmarsh et al. (2014) noted, to avoid scrutiny and be more hidden.

In this case, the team of three teachers occupying one end of the building had intentionally identified new spatial arrangements to learn from one another. As Lucy noted, "we actually made sure we could all see each other from each angle". In the central space of their ILE, the three teachers positioned themselves next to their teaching stations (flat screen TVs mounted next to small whiteboards), so that while sitting on the 'teacher's chair' they faced the centre of the shared space, as well as each other. "I like the fact that we can see each other", remarked Alison. The visibility was observed to have created connections and helped to support conditions that enabled cross-room verbal and non-verbal communications, and reflected a highly collegial approach where sharing of stories and incidental celebrations were highly valued. Lucy noted that:

"You have those awesome moments as well where you (and that's why we've positioned ourselves so at the start of the day or whenever, in a teaching station area) - we can see each other, because there'll be something that happens as you can just catch one another's eye and having to giggle, or 'yeah they got it!' Or something like that. That's the really cool part isn't it?"

While this was perhaps more indicative of what Hargreaves (1994) might note as collegiality rather than collaboration, it reflected a high level of trust between the case-study teachers. A similar practice was observed between the pair of teachers in the other part of the ILE.

For teachers, both *observation* and *seeing* had quickly become understood as integral to the new spatial arrangements. Where the data revealed a grey area was between 'what was seen' and what was done as a result. Teachers often showed reservations about giving colleagues critical feedback in these 'seen' situations, and instead would more commonly determine feedback to be a component of pre-planned observations, particularly for appraisal and mentoring purposes. Feedback was reported to occur but was often self-sought, mirroring Campbell's (2013) notion of the way the de-privatisation of practice is enacted and mediated through cultural norms. For example, there was recognition that Mary had particular expertise in writing. As Lucy explained:

"Because writing is probably my weakest area (and it always has been), and Mary's amazing - and so often I'll just say this is what I've done, I don't think it was correct or I'm just not quite sure where to go next, can you give me some advice on how I could sort of take that to the next stage? So she'll do that and that'll just sort of spur me on a little bit more. Whereas in my own classroom, I may not have asked for her feedback because she wasn't right there."

Although school leaders commented that it was desirable for “teachers to be giving each other’s feedback and challenging each other’s thinking” (Stephen), it was recognised that, “it was still an area for growth” (Janet). Correspondingly, for school leadership, there was a desire to help create the conditions whereby teachers could be more ‘comfortable being uncomfortable’ in these situations.

VISIBILITY AS A ‘THRESHOLD CONCEPT’

With this in mind (or in sight), professional visibility may be advanced as a ‘threshold concept’ (Meyer & Land, 2003) for teachers cohabiting in ILEs. According to Meyer and Land (2003), a threshold concept “represents a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress” (p. 1). To use Meyer and Land’s definition, threshold concepts are transformative, possibly irreversible, and integrative; transformative in that understanding can lead to shifts in perception or thinking; irreversible in that they are “unlikely to be forgotten” (p. 4); and integrative in that it exposes interrelatedness to other key ideas, here to aspects of professional learning. Correspondingly, difficulty in understanding threshold concepts may well, as Meyer and Land (2003) suggest “leave the learner in a state of liminality, a suspended state in which understanding approximates to a kind of mimicry, or lack of authenticity” (p. 10). Furthermore drawing on Foucault (1977), Meyer and Land (2003) suggest that threshold concepts may well, “exert a ‘normalising’ function” (p. 10). The evidence from the Parkside Primary suggests that professional visibility had become a ‘normalised’ practice.

CONCLUSION

As teachers shift from classrooms to collaborative ILEs, teacher practice and behaviour emerge from relatively private into the public domains. Primary school spatial settings with desired affordances of openness and transparency, while responding to contemporary pedagogical beliefs and a determination that the co-location of teachers is optimum, create new and complex socio-spatial assemblages, in which professional visibility comes prominently into question. For many teachers, observation brings with it connotations of having been predetermined, premeditated, and negotiated, often associated with appraisal and more formal feedback requirements. In contrast, ‘seeing’ is more closely connected to the incidental, the unplanned, and the undiscussed. Within the case study ILE, there was a recognition that both *observation* and *seeing* had quickly become understood and normalised as integral to the new spatial arrangements. Consequently, for teachers, the capacity to be ‘comfortable being uncomfortable’ in terms of being both observed and observer, seen and ‘seer’, would appear to be a bottom line expectation.

REFERENCES

- Alterator, S., & Deed, C. (2013). Teacher adaptation to open learning spaces. *Issues in Educational Research*, 23(3), 315-330.
- Argyris, C. (1976). Single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 21(3), 363-375.
- Blackmore, J., Bateman, D., Cloonan, A., Dixon, M., Loughlin, J., O'Mara, J., & Senior, K. (2010). *Innovative learning environments research study*. Retrieved from <http://www.learningspaces.edu.au/docs/learningspaces-final-report.pdf>
- Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and sustaining effective professional learning communities* (Vol. Research Report No 637). University of Bristol, UK: Department for Education and Skills.
- Bryk, A. S., & Schneider, B. (2003). Trust in schools: A core resource for school reform. *Educational Leadership*, 60(6), 40. Retrieved from <https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=9212468&site=ehost-live>
- Campbell, M., Saltmarsh, S., Chapman, A., & Drew, C. (2013). Issues of teacher professional learning within 'non-traditional' classroom environments. *Improving schools*, 16(3), 209-222. doi:10.1177/1365480213501057
- Clandinin, D. J., & Connelly, F. M. (1996). Teachers' Professional Knowledge Landscapes: Teacher Stories--Stories of Teachers--School Stories--Stories of Schools. *Educational Researcher*, 25(3), 24-30. doi:10.3102/0013189x025003024
- de Certeau, M. (1984). *The practice of everyday life* (S. Rendall, Trans.). Berkeley: University of California Press.
- Dovey, K., & Fisher, K. (2014). Designing for adaptation: the school as socio-spatial assemblage. *The Journal of Architecture*, 19(1), 43-63.
- Dudek, M. (2000). *Architecture of schools: The new learning environments*. London: Architectural Press.
- DuFour, R. (2011). Work together: But only if you want to. *Phi Delta Kappan*, 92(5), 57. Retrieved from <http://sfx.unimelb.hosted.exlibrisgroup.com/sfxlcl41?sid=google&auinit=R&aualast=DuFour&atitle=Work%20together%3A%20But%20only%20if%20you%20want%20to&title=Phi%20Delta%20Kappan&volume=92&issue=5&date=2011&spage=57&issn=0031-7217>
- Elmore, R. F. (2012). Foreword. In V. Troen & K. C. Boles (Eds.), *The power of teacher teams: With cases, analyses, and strategies for success*. Thousand Oaks, CA: Corwin.
- Flinders, D. (1988). Teacher isolation and the new reform. *Journal of Curriculum and Supervision*, 4(1), 17-29.
- Forte, A. M., & Flores, M. A. (2013). Teacher collaboration and professional development in the workplace: a study of Portuguese teachers. *European Journal of Teacher Education*, 1-15. doi:10.1080/02619768.2013.763791
- Foucault, M. (1977). *Discipline and punish: The birth of the prison* (A. Sherisan, Trans.). New York: Random House.
- Fullan, M., & Langworthy, M. (2014). *A rich seam: How new pedagogies find deep learning*. Retrieved from London: http://www.michaelfullan.ca/wp-content/uploads/2014/01/3897.Rich_Seam_web.pdf
- Gebhard, J. G. (1999). Seeing teaching differently through observation. In J. G. Gebhard & R. Oprandy (Eds.), *Language teaching awareness: A guide to exploring beliefs and practices* (pp. 35-58). Cambridge: Cambridge University Press.
- Gislason, N. (2007). Placing education: The school as architectural space. *Paideusis*, 16(3), 5-14.
- Goetz, J. P., & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research* (Vol. 19): Academic Press Orlando, FL.

- Hargreaves, A. (1994). *Changing teachers, changing times: Teachers' work and culture in the postmodern age*. London : Cassell, 1994.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analysis relating to achievement*. Abingdon: Routledge.
- Hattie, J. (2012). *Visible learning for teachers*. Abingdon: Routledge.
- Hayes, D. (2006). Telling stories: Sustaining improvement in schools operating under adverse conditions. *Improving schools*, 9(3), 203-213. Retrieved from <http://sfx.unimelb.hosted.exlibrisgroup.com/sfxlcl41?sid=google&aunit=D&aulast=Hayes&atitle=Telling%20stories%3A%20Sustaining%20improvement%20in%20schools%20operating%20under%20adverse%20conditions&id=doi%3A10.1177%2F1365480206069025&title=Improving%20schools&volume=9&issue=3&date=2006&spage=203&issn=1365-4802>
- Horne, M. (2004). Breaking down the school walls. *Forum*, 46(1), 6.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
- LeCompte, M., & Schensul, J. J. (2010). *Designing & conducting ethnographic research: An introduction* (2nd ed. Vol. 1). Lanham: AltaMira Press.
- Levine, T. H., & Marcus, A. S. (2010). How the structure and focus of teachers' collaborative activities facilitate and constrain teacher learning. *Teaching and Teacher Education*, 26(3), 389-398. doi:<http://dx.doi.org/10.1016/j.tate.2009.03.001>
- Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal*, 19(3), 325-340.
- Lortie, D. (1975). *The schoolteacher: A sociological study*. Chicago: University of Chicago Press.
- McGregor, J. (2003). Making Spaces: Teacher workplace topologies. *Pedagogy, culture & society*, 11(3), 353-377. doi:10.1080/14681360300200179
- Meyer, R., & Land, R. (2003). *Threshold concepts and troublesome knowledge: Linkages to ways of thinking and practising within the disciplines*. Retrieved from Edinburgh:
- Monahan, T. (2002). Flexible space and built pedagogy: Emerging IT embodiments. *Inventio—Creative Thinking about Learning and Teaching*, 4(1).
- Nair, P., Fielding, R., & Lackney, J. (2009). *The language of school design: Design patterns for 21st century schools* (Revised ed.): DesignShare.
- OECD. (2013). *Innovative Learning Environments, Educational Research and Innovation*. Retrieved from <http://dx.doi.org/10.1787/9789264203488-en>
- Prain, V., Cox, P., Deed, C., Edwards, D., Farrelly, C., Keefe, M., . . . Yager, Z. (2014). New practices, new knowledge and future implications for learning in open-plan settings for low SES students. In V. Prain, P. Cox, C. Deed, D. Edwards, C. Farrelly, M. Keefe, V. Lovejoy, L. Mow, P. Sellings, B. Waldrip, & Z. Yager (Eds.), *Adapting to teaching and learning in open-plan schools*. Rotterdam: Sense.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Thousand Oaks, CA: Sage.

- Saltmarsh, S., Chapman, A., Campbell, M., & Drew, C. (2014). Putting “structure within the space”: spatially un/responsive pedagogic practices in open-plan learning environments. *Educational Review*, 1-13. Retrieved from <http://sfx.unimelb.hosted.exlibrisgroup.com/sfxlcl41?sid=google&auinit=S&aualast=Saltmarsh&atitle=Putting%20%E2%80%9Cstructure%20within%20the%20space%E2%80%9D%3A%20spatially%20un%2Fresponsive%20pedagogic%20practices%20in%20open-plan%20learning%20environments&id=doi%3A10.1080%2F00131911.2014.924482>
- Schon, D. (1983). *The reflective practitioner: How professionals think in action*. London: Temple Smith.
- Stake, R. E. (1995). *The art of case study*. Thousand Oaks: Sage.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. *Journal of Educational Change*, 7(4), 221-258. Retrieved from <http://sfx.unimelb.hosted.exlibrisgroup.com/sfxlcl41?sid=google&auinit=L&aualast=Stoll&atitle=Professional%20learning%20communities%3A%20A%20review%20of%20the%20literature&id=doi%3A10.1007%2Fs10833-006-0001-8&title=Journal%20of%20educational%20change&volume=7&issue=4&date=2006&spage=221&issn=1389-2843>
- Tanner, C. K., & Lackney, J. A. (2006). *Educational facilities planning: Leadership, architecture, and management*. Boston: Pearson.



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I can see clearly now the wall Is gone: Situated Professional Learning in a Collaborative Innovative Learning Environment

Date:

2016

Citation:

Bradbeer, C, I can see clearly now the wall Is gone: Situated Professional Learning in a Collaborative Innovative Learning Environment, Informing education theory, design and practice through learning environment evaluation, 2016, pp. 55 - 64

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