

## **REFRAMING PROFESSIONAL LEARNING WITHIN A COLLECTIVE PROFESSION: RICH AND SHARED ACCOUNTABILITY AS AN INTEGRATED PROCESS OF DIALOGUE, OBSERVATION AND FEEDBACK ABOUT 'STANDARDS'**

Dr Bev Rogers  
*Flinders University, Adelaide*

### **Abstract**

Schools are now situated within a dominant public policy regime that is demanding compliance and standardisation, at a time when the achievement of success for all students demands a capacity at the school level to design and deliver an approach that embeds "an ongoing process of professional learning for teachers" (Caldwell, 2014, p. 4). Such professional learning must provide opportunities for teachers to reflect on their own assumptions and beliefs, to test their assumptions and adapt and reshape strategies in light of their analyses in the context of a collective profession. The development of teacher capability matrices at a primary school in New Zealand appears to be a unique and authentic expression of dialogue between teachers about how teachers can seriously engage in their own learning and be accountable for continuously improving their instructional practice through integrating what they have learned into their classroom practice. The matrices support dialogue about teaching and learning through making knowledge and thought "more explicit", providing a platform for regular reflection, observation and feedback among and between beginning and experienced teachers. In cultivating such dialogue, teachers learn to conceive of, to speak in, and to assess their work, in terms of agreed 'standards'.

### **Introduction**

The image of teachers as 'a community within a school' has gained prominence in the last twenty years under the umbrella term of professional learning communities (or Communities of Practice (Wenger, 1998)). It represents a profound shift from a focus on the individual teacher engaged with professional development outside of the school, to an emphasis on teachers learning with colleagues and within the ongoing work of the school (Allen, 2013). The concept "has permitted a discourse to emerge that goes beyond the purely technical rational approaches ... [which] focus on the individual, ... gloss[ing] over the interdependencies between individuals and their communities" (Loftus, 2010, p. 41). This change in focus has both challenged the norm of 'privacy' which views teaching as an individual practice within isolated classrooms (Little, 1990), and strengthened the idea that interactions with colleagues are critical sources for professional learning. There is broad agreement that Professional Learning Communities (PLCs) demonstrate:

- a shared vision and sense of purpose related to student learning;
- collaboration;
- reflective or inquiry-based dialog; and
- collective responsibility for student learning (Grossman, Wineburg, & Woolworth, 2001; Hord, 2004)

In moving to a collective focus on professional learning, the processes of *changing* practice are seen as a sociocultural interaction or in Wittgenstein's terms "how to go on" (Wittgenstein, 1958, p. 154)—the "ability to use the stories of practice so that we now know what to do in certain situations" (Loftus, 2010, p. 44). Practice then "lies at the intersection where knowledge, reflection and action come together ... [in] continuously coming to know and to be" (Higgs, Loftus, & Trede, 2010, p. 4).

In recent times, increased accountability demands on schools have influenced the formation of PLCs revealing a preoccupation with a technical and "narrow acquisition of craft knowledge and skills" (Allen, 2013, pp. 191-192). Rather than developing trusting collegial relationships which provide a foundation for teacher learning—a "contrived collegiality" (Hargreaves & Dawe, 1990) is focused on learning "instructional strategies developed by others" (p. 227) aimed at "accomplishing work" rather than "building relationships" (Wood, 2007, p. 723). Wood (2007) suggests that without "safe spaces" for dialogue between teachers, "practice will remain private and thus closed to inquiry and improvement" (p. 194).

Lingard (2011) argues that the collegiate project of teacher professional learning communities, is "almost being closed down in Australia" as a result of the surveillance of 'performance', enacted in policy developments since 2009, which include the development of *Teacher Standards* and the associated focus on "teachers as the objects rather the subjects of policy" (p. 230). Schools are now situated within a dominant public policy regime that is demanding compliance and standardisation, at a time when the achievement of success for all students demands a capacity at the school level to design and deliver an approach that embeds "an ongoing process of professional learning for teachers" (Caldwell, 2014, p. 4). A focus on "improvement of teachers' performance" through teaching standards "leaves silent the assumptions about *how* change will occur and what *model of change* is implicit" (Sachs, 2003, p. 180 emphasis added).

In Australia, the current 'solution' for 'improvement' in teacher quality (seen as performance), is an increasingly dominant regime of "direct supervision" and *performance management* with the additional requirement for mandated hours of 'professional development' in order to maintain accreditation, conceptualised largely as "a series of discrete 'activities' or 'episodes' rather than as the ongoing process" (Groundwater-Smith & Mockler, 2010, p. 59). Dominant managerialist notions of leadership are enacted in performance management 'conversations' in which teachers are positioned as individual contributors to 'school performance' by improving their 'performance' as judged against the *Teacher Standards* and in relation to measures such as the NAPLAN results.

Interestingly in New Zealand, noted for its early neoliberal directions, a school is developing what 'professional learning community' might mean through dialogue between teachers about school-developed 'standards' called matrices. What is revealed in the school is a core assumption about teaching as a collective profession. In describing the research, I firstly focus on the impact of *Teacher Standards* on views of teaching as 'performance' in Australia and the possibilities of *STANDARDS* being used to support dialogue. Following that, I discuss a school in New Zealand, where the development of teacher capability matrices and the 'triples' review of practice, appears to be a unique and authentic expression of dialogue between teachers about how teachers can seriously engage in their own learning and be accountable for continuously improving their instructional practice through integrating what they have learned into their classroom practice. What we see in these practices is the means of making explicit the *model of change* and *how* practices *change*.

## **Standards in Australia**

The *Australian Professional Standards for Teachers* (AITSL, 2011) are being deployed through the "re-accreditation of courses of initial teacher education, the registration ('licensing' and 'certification') of graduate teachers, and the 'performance development' of practicing teachers over the course of their career" (O'Brien, 2012, p. 3). Various researchers identify that the use of standards generates a culture of performativity (Ball, 2003), focused on measurable performance goals in the service of the economy and markets, which "stifles the otherwise potentially fluid thinking" of teachers as designers of learning (Meng, 2009, p. 159). O'Brien (2012) argues that the operation of *Standards* is a "more or less calculated activity" aimed at shaping teachers' professional conduct by techniques which not only work *through* teacher agency but also *against* it by "means of surveillance and regulation of that agency" (p. 2). Groundwater-Smith and Mockler (2010) identify two dimensions of professional

learning: purpose (continuum of surveillance through to teacher learning) and location of agency (continuum of bureaucratic through to teacher agency) against which four kinds of structures and processes for the review of practice can be mapped: compliance; performance management; 'professional development' and teacher formation and renewal (p. 61). This can be shown in the following diagram.

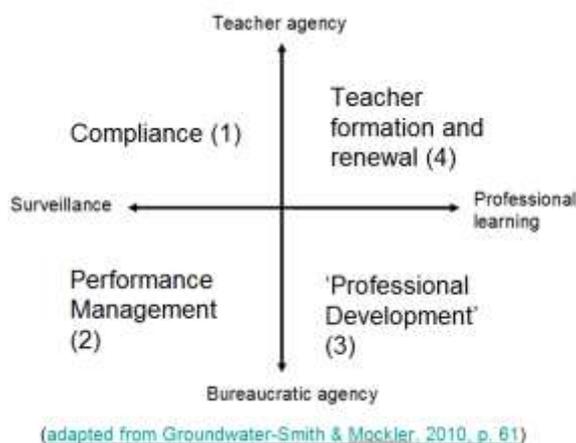


Figure 1. Dimensions of Purpose and Agency for Review of Professional Practice

The current dominant processes which support review of practice in relation to the *Standards* in Australia can be located largely within quadrants one, two and three, reflecting a dominance of surveillance and bureaucratic agency. Professional responsibility and 'teacher quality' is reconceptualised in a technical form related to 'performance', constituted through recourse to studies such as the Grattan Institute, and John Hattie, for example (AITSL, 2011, p. 22). In presenting itself as "a way of restoring trust in the profession, ... this rationality presupposes a culture of mistrust" (O'Brien, 2012, p. 4) and positions people to "think of themselves as subjects of audit" (Power, 1994, p. 3). Smyth (2006) argues that what is occurring is a failure to understand the complex nature and work of schools and teachers.

In contrast, Yinger and Hendricks-Lee (2000) suggest that standards can support dialogue about teaching and learning, in making knowledge and thought "more explicit", providing a platform "for reflection, discourse, and improvement among novices and experienced practitioners" (p. 104) if the purpose of dialogue allows for reflection on assumptions, meaning and beliefs rather than 'recipes' or prescriptions of practice (Santoro, 2013).

The standards themselves provide a starting point for discussion of what accomplished professional practice 'looks like' ... [t]heir power is not in the words and sentences they contain, but rather in the scope they offer to build a shared understanding of what it is that an accomplished teacher knows and does, and in the processes that sit behind the expression of accomplishment, representing the opening of professional practice to debate, discussion and improvement. (Groundwater-Smith & Mockler, 2010, p. 59)

## The Research Study

A school in New Zealand, is reframing their leadership around a process of horizontal accountability for integrating what teachers have learned in professional development into their classroom practice. The research study described in this paper sets out to explore, understand, and articulate the development of, and embedding in school culture of teacher capability matrices in a NZ school. Each teacher and leader was interviewed individually for a period of 45 – 60 minutes. The data was coded and hermeneutically analysed for emergent and powerful themes which underpin how the capability matrices enable dialogue with and between teachers and exploring how this occurs. The research also

adopts what Kemmis et al. (2014) call a philosophical-empirical inquiry engaging empirically in conversations with teachers about practices in the school and engaging with contemporary practice theory and philosophy to "explore how practice theory helped us to interpret the empirical circumstances we encountered" (p. 13). Practice theory includes the idea that practices are "enmeshed in practice architectures" (p. 14)—"what people actually say and do and how they relate to other people and things in the course of their practising"—what Kemmis et al. (2014) refer to as the "sayings, doings and relatings possible" (p. 14). These architectures are interdependent and arise in conditions which both enable and constrain the intersubjective space in which people (and things) encounter one another.

Canning Street Normal School has about 600 students enrolled across years 1 to 6. The French concept of *école normale* refers to the establishment of schools to model best teaching practices thereby setting a standard or *norm* for student teachers. *Normal Schools* have been in existence since the 16th Century and have been established in the United States, Canada and Europe and New Zealand. In New Zealand the term *Normal School* can refer to one of 22 primary or intermediate schools used for teacher professional experience associated with University pre-service degrees. The majority of new appointees to Canning Street Normal School come from the graduates who have completed their practicum in the school, joining a number of staff who have taught in the school since the principal was appointed, twenty years ago. Few experienced teachers from other schools apply for vacancies, but some of the 'beginning teachers' are also people who have changed careers and are then experienced in other fields.

The school is structured into three *Syndicates* as year levels (Junior 1-2, Middle 3-4, and Senior 5-6). *Syndicates* are teams of about 6 or 7 staff with two leaders (Syndicate Leader and Team Leader). Teacher-created capability matrices (CMs) have been established and reviewed for understanding and articulating teacher growth and development in certain areas: Reading, Writing, Mathematics, Thinking, Integration, e-Learning and Coaching (developing in 2015). The CM process began ten years ago with staff agreeing to having outside experts come in to the school to work with staff. The purpose was to explore:

what was effective practice – what would it look like, what would we see teachers doing -  
what would we hear them saying – what would the room/environment look like?

Following the work with an outside expert, a Capability matrix was/continues to be developed by staff which identifies four levels of teacher development: *Novice, Apprentice, Practitioner, Expert Leader*.

They are living documents that are continuously changing. The matrices are always being reviewed and making sure that they are relevant to our staff; because, they don't only set goals for [each staff memembr] ... but you can use them to set goals for staff ... to help the staff as a whole.

The process takes a long time but the co-construction creates a language and common way of describing the practice encouraging staff in "initiating rich conversations" about their practice. Teachers locate themselves on the relevant matrix and identify goals for development to "make a shift in over the whole year". The goals are chosen by each teacher within a focus area of their choice, or they may be determined by the Ministry (Science in 2014) or for example as a result of the school limiting the focus for new teachers to Reading, Writing and Mathematics (in that order).

The matrices are enacted through a *Triples* process where two people (a syndicate or team leader and 'in school' expert) observe a teacher in an agreed area of development and provide questions and feedback and revisit previous goals. Part of the responsibility for their own and each other's learning is finding out how each teacher is working towards their goals and asking whether they need help to do this. Once teachers reach the Expert level, they become a 'Tripler'. The triples process began more than five years ago as a consideration of a model of 'triangulation', which was based on peer critique of various aspects of work (and occurring at NZ University). Initially, Canning Street School changed the process to also be one of performance appraisal with the two senior colleagues. "It started off with a whole set of points that they were going to assess you on" but now it is negotiated with the teacher

prior to the triple process, to select the focus, unless the teacher is in their first two years of teaching (PRTs) and then they are assessed on Reading, Writing and/or Mathematics. The giving of feedback is modelled on a questioning process which prompts thinking on the part of the person being 'tripled'.

The dialogue is between both of you—it's not just me speaking, I'm not just telling the person what to do ... there's quite often informal dialogue occurring prior to and post triples, because people talk about it.

The term professional practice is used by staff in most descriptions of the Matrices/Triples process. The time spent with one outside expert, encouraged the development of the 'art of questioning' through staff recording the questions and opening statements he used and how he spoke to teachers which helped the articulation of "next steps". This became a strong model for the school and has recently been developed into the new Coaching Capability Matrix.

it's a conversation – but then if you carefully stage your questions ... the person who has been tripled ends up articulating their own next steps.

there's been a few hiccups – but mostly we've developed into a 3-way learning community where me, you and the other person have all something to learn from what we saw – so it's not just 2 looking at 1 – and so we're very conscious of the fact that it's inclusive learning for the 3 of us.

Teachers comment that it is a collaborative process which has grown over time as a result of actual experience on the part of all those involved.

Matrices are part of the School's culture and the way we develop teachers ... It's taken a long time to get where we are ... to get the buy-in from everybody ... So it's a whole way of working together; and a trust issue and being honest with each other.

Each teacher is tripled once per term (evolved from once every six weeks). The intensity has changed to allow teachers "time to actually act on the feedback they've been given and make those changes". Over time the feedback discussion has become very collegial and "more open; it's shared now, rather than being feedback to". Each teacher "would have the Matrix highlighted as to where they considered they were beforehand ... we would focus *only* on those goals that they had set themselves".

now it's more focussed: I want feedback on my questioning skills, or how I scaffold children, or ... And then they'll only give you feedback on that. And, it can end as sort of more of a team teaching thing as well. And we've done specifically that to help people as well.

It's made people talk a lot more to each other, whether it's discussing what you've seen or discussing what you are going to do ... if people are really stuck or not sure, they do realise that there's a lot of support that you can ask for through Triples, through Tutor Teachers that you're working with and Syndicate Leaders, and regular meetings, regular how are you going with this?

The Matrices process has been in place for about ten years with the Triples process about 5 years. Some staff at the school have seen the development of the CM/Triples process over time and can remember a time when it was introduced—when it was "very set, firm ... you almost used a formula". Every year, there is input from staff based on "all those experiences that we've had of matrices, what's worked and what hasn't worked" and from two key experts who visit the school. The triples processes have "evolved" with the current thinking being about maximising the benefit of the triple to all three people by making good use of the time and expertise of the 'triplers'.

There is a tension for teachers within the tripling process with one extreme being 'show-casing'—showing what teachers can do, and the other 'deficit'—showing what teachers need help with. There is a balance to be achieved so that expertise is recognised and valued but there is also an opportunity to open up practice for scrutiny and useful feedback. The tension is experienced by each teacher as they move through the triples process and discussed openly in staff and Syndicate meetings. Some staff broaden the experience of feedback through team teaching and this makes it more likely that teachers open themselves up to feedback on chosen areas of difficulty.

## Discussion

The underpinning driver for the Matrices/Triples process is said by staff to be "striving for excellence", interpreted as "life-long learning and the excitement about life-long learning" which is as applicable to staff as to students (since a similar matrix process is used for student learning in each class). The metaphor used by staff is one of "a learning journey" which is "always on the move". The processes focus on people thinking about "what does a good teacher do?" and building leadership of learning across the staff.

The Matrices/triples process cultivates rich conversations that go on between colleagues and there are opportunities for them – that underpins a lot of professionalism ... being trusted, being allowed to work through, to grow and explore pedagogy, and to have those conversations builds professionalism.

The 'leaders' in the school are an expanding group of teachers recognised through the processes as "expert leaders". In the process they develop their understanding of the importance of asking the right question. This is matched by a growing realisation of putting forward the right balance of 'performance' and 'openness to critical feedback'. The increased dialogue and increased preparedness to use questions to prompt thinking is "the way we do things". The dialogue and questioning is only possible through trust and honesty. The dialogue is important to improving professional practice – "being comfortable with people and to share with people". The central 'life' of the Triples/Matrices processes comes from the *next steps* identified in dialogue which translate change in practice into "measurable things that you can change within your teaching practice".

sometimes a whole area of teaching can be quite daunting, but when it's broken down to what you'd expect to see from the children, what you would do in the classroom, what you'd expect to do in your PD it becomes possible ... you can pinpoint things that need developing and very clear steps on how to do that.

it's made a big difference in people being able to very clearly see their next steps. It's made feedback so much more relevant because you can pinpoint things that need developing and very clear steps on how to do that.

The 'culture' which supports teachers as active *learners* in regard to their own practice, at Canning Street, appears to reflect four of the five elements identified by Lieberman and Miller (1990, p. 107) as essential for constituting such a culture: (1) norms of collegiality, openness and trust; (2) opportunities for inquiry; (3) learning content within context; and (4) reconstruction of leadership roles. The Triples/Matrices process provides a structure which enacts the fourth quadrant shown earlier of teacher formation and renewal by emphasising the dimensions of teacher agency and teacher learning (Groundwater-Smith & Mockler, 2010, p. 61).

In reflecting on the processes in place, it is helpful to adopt a practice-informed approach (Wilkinson & Kemmis, 2015, p. 342) which provides valuable insights into the formation and *changing* of practices in educational locations. In such an approach, we see that practices come into being because people, acting collectively, bring them into being. Practices unfold in a particular place, at particular times and with particular people (Kemmis et al., 2014, p. 33). Collective projects such as the Triples/Matrices process orchestrate both *individual* understanding and action as well as being shaped by arrangements present in or brought into the site. The location of practices is not just a "container-like 'context' for practices", but practices are shaped and to an extent partly prefigured "by the particular, historically-given contents and conditions pertaining at a particular site at a particular moment" (p. 33).

*[T]he way a practice unfolds or happens is always shaped by the conditions that pertain in a particular site at a particular time. The practices that we observe in real life ... are composed in the site where they happen, and they are composed of resources found in or brought to the site. (p. 33 emphasis in original)*

An organisation is therefore "an orchestration of practices ... constantly being constructed and reconstructed through human activity" (Wilkinson & Kemmis, 2015, p. 345). Some of this activity

produces 'set-ups' which enable and constrain other human activity (Schatzki, 2006, p. 1863). Practices are therefore "both stable and open-ended" (Wilkinson & Kemmis, 2015, p. 345). People engage in practice *architectures* in a particular site, which enable and constrain practices, by using the resources of language and discourses, the resources of physical spaces and what is done, and the resources of relationships and ways of being together in which shared understandings and agreements about collective action are reached. Practices take up *sayings*, *doings* and *relatings* which are already to be found in the setting and leave behind, "particular kinds of discursive, physical and social traces or residues of *what happened* through the unfolding of the practice" as practice traditions (p. 34). This view contrasts with dominant managerialist perspectives which adopt a linear view of organisations and change, constructing organisations as 'entities', consisting of individuals in roles with structures and functions (Price, 2013). The "practice architectures" of the triples/matrices processes establish a shared language or *sayings*, evidenced as "ideas and understandings about particular pedagogical practices" (Wilkinson & Kemmis, 2015, p. 349) embedded over time, in each matrix of teacher practice. It also establishes the connected *doings* and *relatings* in a "practice-arrangement bundle" (Schatzki, 2012) which is constantly (re)negotiated as both teaching staff leave and new staff are employed and as more teachers become 'triplers'. What emerges is a sense of respect and professional agency of teachers.

The *sayings*, *doings* and *relatings* of leading are simultaneously shaping and being shaped by the sayings, doings and relatings of other practices, such as professional learning and professional development days, and in the triples-matrices approach to teaching and learning occurring. None of these practices stand in isolation from the other. The shared practices of leading that accompany the development of triples and matrices "hang together" as ecologies of practices, rather than existing "wholly in the actions of individual participants" (Kemmis, Edwards-Groves, Wilkinson, & Hardy, 2012, p. 48). The *orchestration* of practices: the practices of leading, teaching, teacher learning, student learning, and research and reflection that occur in the school are interconnected and described by teachers as "a learning culture" evident in the school. We found that over time the development of the Matrices/triples process involved "changing the sayings, doings and relatings that compose practices" (Kemmis, Wilkinson, Hardy, & Edwards-Groves, 2009, pp. 5-6) of leadership and professional learning. The table below summarises these.

Table 1: Changes in sayings, doings and relatings to establish Matrices/Triples process

Sayings	Changes in the language of talking about pedagogy and an understanding of what is meant to be at various stages of development for certain key areas of practice. This was enacted in the Triples process through dialogue both pre and post to enable the questions to be asked about goals and 'next steps' in development.
Doings	Changes in how things are done – eg collaboration, sharing and honesty, trust in giving feedback and being equally responsible for their own growth as for other people's growth. The Personal Professional Development Plan (PPDP) depends on the Matrices/triples process and the recognition of leading is in relation to supporting and challenging other staff to maintain the focus on 'excellence and learning. Working in planning syndicate teams with release and 'banking' of non-contact time. Team-teaching as a common strategy for support and more common as a preferred way of teaching. The Matrices are enacted with staff and students creating a sense of shared language and dialogue about learning and the negotiation of 'next steps'.
Relatings	Changes to how people relate to one another – e.g., from more hierarchical to consciously inclusive working relationships between staff in working teams, and between students in classrooms. The Triples process created relating that shared the responsibility for learning and for other's learning and 'asking the right questions' which turned out to be a learning experience and 'shift' in practice for those involved. The Matrices are enacted with staff and students and reliant on truth and sensitivity to vulnerability in being open to learning.

How this 'hangs together'	Changes in sayings, doings and relatings that 'hang together' to form ways of working – eg Matrices/triples process was permeated by collegiate dialogue that was genuinely caring about growth and learning for practice of other staff and enabled ongoing development of modifications to both Matrices and Triples process which focused on the 'life' that the process gives to the ongoing learning.
---------------------------	--

(Kemmis et al., 2009, p. 6 adapted for Canning Street research )

Kemmis and Trede (2010) argue that practice "in the present always makes some ... future practices, more possible than others" (p. 29). What is spoken, the actions taken and how we relate to one another and the world through practice shapes "what can and will be thought and said in the future, what will be done, and the ways people will relate to each other and the world" (p. 29). Practices are human social interactions in which people participate and experience something greater than their own perceptions and perspectives on the world—something that is intersubjective (Habermas, 2003). As practices such as the Triples/Matrices process unfold, the consequences shape and are shaped by the practice traditions in the school. For Canning Street School teachers and leaders, the trust and honesty of *sayings, doings* and *relatings* is a key feature of what is reproduced. This is also the context for the school's role as a *Normal School*, where student teachers become part of the practice traditions of the school for a brief time prior to graduation but long enough to appreciate the 'power' of shared dialogue. This particular *happening-ness* of practice shapes what actually transpires not "calculations and abstractions" (Kemmis & Trede, 2010, p. 33).

Attempting to individualise practice through *Standards* motivated by technical and control interests removes the human interaction and social action from practice, and therefore disregards the unique, complex and humane aspects and conditions of practice. "In a world of ... diversity and uncertainty, future practice requires more than technical competency" (p. 36). It requires inclusive, sustainable, reflective and transformative practice which is "informed by rich learning which includes critical self-reflection, collective debate and social action" (p. 36).

Future practice arises from reflective, creative, dialogical and critical spaces. Such spaces enable practitioners to learn from experiences, develop their professional identity, and deepen their understanding to foster creative and just practice solutions ... [When practice] is conceptualised as human, constructed and contextualised by the uniqueness of each practice situation, practice... galvanises a sense of collective purpose and agency among practitioners, and assists them to co-create the practices of the future. (pp. 37-38)

## Conclusion

The paper has mobilised a practice-informed approach to theorising *changing* practices as it occurs in Canning Street School. Firstly, practices are enabled by practice architectures which "highlights that changing practices necessitates not only changing the professional practice knowledge of individuals, but also the practice architectures that support these practices" (Wilkinson & Kemmis, 2015, p. 354). Secondly, particular practices function within ecologies of interrelated and interconnected practices (student learning, professional learning, leading, teaching and research and reflection). *Changing* practices are part of the arrangements of *sayings, doings* and *relatings* which create and sustain practices such as the Matrices/Triples arrangement. Thirdly the conception presented of leading *changing* practices foregrounds its "inherent *sociality*" (Wilkinson & Kemmis, 2015, p. 355) and its part in the overall process of transforming the school into a place of *learning*. The interconnected practices of leading, professional learning, teaching, student learning and researching and reflecting offer a way of 'striving for excellence' which underpins the 'life' of the school. The theory of practice architectures and ecologies of practices allows us to understand how this process of transformation occurs at Canning Street in the way in which leading is broadly seen as the responsibility:

to enable and constrain educational practices by creating the practice architectures hospitable to educational practices, and by creating and sustaining the living web of interconnected practices—ecologies of practices ... that will foster and sustain educational practices. In our times, these responsibilities entail nurturing educational practices so they

do not degrade to the extent that they are no more than schooling or technocratic administration—for those are the threats education faces in the twenty-first century. (Wilkinson & Kemmis, 2015, p. 356 emphasis added)

The matrices/triples processes support dialogue about teaching and learning through making knowledge and thought "more explicit", providing a platform for regular reflection, observation and feedback among and between beginning and experienced teachers. In cultivating such dialogue, teachers learn to conceive of, to speak in, and to assess their work, in terms of agreed 'standards'. This is in the context, not just of individual teacher practices reviewed against the idea of 'standards', but "the entire school is involved in discussion of and action on the issue of teaching and learning" with teachers working in "collective and collaborative structures" in ways that bring about positive changes in student learning because these "*connections are explicitly made*" (Lieberman & Miller, 1990, p. 120 emphasis in the original).

## References

- AITSL. (2011). *Australian Professional Standards for Teachers*. Sydney: Australian Institute for Teaching and School Leadership Retrieved from [www.aitsl.edu.au/](http://www.aitsl.edu.au/).
- Allen, D. (2013). Restructuring professional learning community a collective creation. *Improving Schools*, 16(3), 191-208. doi: 10.1177/1365480213501056
- Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Educational Policy*, 18(2), 215-228.
- Caldwell, B. J. (2014). Realigning the governance of schools in Australia: Energising an experimentalist approach. *Seminar Series Centre for Strategic Education*, 233, 1-14.
- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a theory of teacher community. *Teachers College Record*, 103(6)(6), 942-1012.
- Groundwater-Smith, S., & Mockler, N. (2010). *Teacher Professional Learning in an Age of Compliance: Mind the Gap* (Vol. 2): Springer.
- Habermas, J. (2003). *The future of human nature* (W. Rehg, M. Pensky & H. Beister, Trans.). Cambridge: Polity Press.
- Hargreaves, A., & Dawe, R. (1990). Paths of professional development: Contrived collegiality, collaborative culture, and the case of peer coaching. *Teaching and Teacher Education*, 6(3), 227-241.
- Higgs, J., Loftus, S., & Trede, F. (2010). Education for Future Practice. In J. Higgs, D. Fish, I. Goulter, S. Loftus, J.-A. Reid & F. Trede (Eds.), *Education for Future Practice* (pp. 3-13). Rotterdam, The Netherlands: Sense Publishers.
- Hord, S. M. (Ed.). (2004). *Learning Together, Leading Together: Changing Schools through Professional Learning Communities*. New York: Teachers College Press.
- Kemmis, S., Edwards-Groves, C., Wilkinson, J., & Hardy, I. (2012). Ecologies of practices. In P. Hager, A. Lee & A. Reich (Eds.), *Practice, learning and change* (pp. 33-49). Dordrecht: Springer.
- Kemmis, S., & Trede, F. (2010). Practice and developing future practice In J. Higgs, D. Fish, I. Goulter, S. Loftus, J.-A. Reid & F. Trede (Eds.), *Education for Future Practice* (pp. 29-40). Rotterdam, The Netherlands: Sense Publishers.
- Kemmis, S., Wilkinson, J., Edwards-Groves, C., Hardy, I., Grootenboer, P., & Bristo, L. (2014). *Changing Practices, Changing Education*. Singapore, New York, London: Springer.
- Kemmis, S., Wilkinson, J., Hardy, I., & Edwards-Groves, C. (2009). *Leading and Learning: Developing Ecologies of Educational Practice* Paper presented at the AARE Annula Conference, Canberra.
- Lieberman, A., & Miller, L. (1990). Teacher Development in Professional Practice Schools. *Teachers College Record*, 92(1), 105-122.
- Lingard, B. (2011). Changing Teachers' Work in Australia. In N. Mockler & J. Sachs (Eds.), *Rethinking Educational Practice Through Reflexive Inquiry* (pp. 229-245). New York: Springer.

- Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, 91(4), 509-536.
- Loftus, S. (2010). Exploring Communities of Practice. In J. Higgs, D. Fish, I. Goulter, S. Loftus, J.-A. Reid & F. Trede (Eds.), *Education for Future Practice* (pp. 41-50). Rotterdam, The Netherlands: Sense Publishers.
- Meng, J. C. S. (2009). Saving the teacher's soul: exorcising the terros of performativity. *London Review of Education*, 7(2), 159-167.
- O'Brien, P. C. (2012). *The standard bearers: Governing teachers through professional standards*. Paper presented at the 2012 TASA Conference Emerging and enduring inequalities: Proceedings of the annual conference of The Australian Sociological Association 2012, Lucia Campus, University of Queensland, Brisbane.
- Power, M. (1994). *The audit explosion* (pp. 53). Retrieved from <http://www.demos.co.uk/publications/auditexplosion>
- Price, M. O. (2013). *Remaking jobs and organisations: A Schatzkian practice perspective*. ((unpublished doctoral thesis)), University of Technology, Sydney.
- Sachs, J. (2003). Teacher Professional Standards: Controlling or developing teaching? *Teachers and Teaching: theory and practice*, 9(2), 175-186.
- Santoro, N. (2013). The Making of Teachers for the Twenty-First Century: Australian Professional Standards and the Preparation of Culturally Responsive Teachers Chapter 19. In X. Zhu & K. Zeichner (Eds.), *Preparing Teachers for the 21st Century*. Berlin, Heidelberg: Springer-Verlag.
- Schatzki, T. R. (2006). On organizations as they happen. *Organization Studies*, 27, 1863-1873.
- Schatzki, T. R. (2012). A primer on practices. In J. Higgs, R. Barnett, S. Billett, M. Hutchings & F. Trede (Eds.), *Practice based education* (pp. 13-26). Rotterdam: Sense Publishers.
- Smyth, J. (2006). The Politics of Reform of Teachers' Work and the Consequences for Schools: Some implications for teacher education. *Asia-Pacific Journal of Teacher Education*, 34(3), 301-319.
- Wenger, E. (1998). *Communities of practice. Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wilkinson, J., & Kemmis, S. (2015). Practice Theory: Viewing leadership as leading. *Educational Philosophy and Theory*, 47(4), 342-358. doi: <http://dx.doi.org/10.1080/00131857.2014.976928>
- Wittgenstein, L. (1958). *Philosophical Investigations* (G.E.M. Anscombe, Trans. 3rd ed.). Upper Saddle River, N.J.: Prentice Hall.
- Wood, D. (2007). Teachers' learning communities: Catalyst for change or a new infrastructure for the status quo? *Teachers College Record*, 109(3), 699-739.
- Yinger, R. J., & Hendricks-Lee, M. S. (2000). The Language of Standards and Teacher Education Reform. *Education Policy*, 14(1), 94-106.