

**2009 ACSA Biennial Conference, Canberra**

**Title: Look both ways: Working to develop a professional learning culture.**

**Theme: Creating a professional culture**

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A desire to see university learning and research shared with teachers underpinned my decision to move from teacher education and course coordination at university to teaching and professional development and curriculum coordination in a school. This paper will explore the journey and some attempts to encourage the professional learning of practicing teachers. The reality of working in a school again has sharpened my awareness of the 'intensification' of teachers' work (Apple, 1986) and has encouraged me to explore different ways of sharing understanding. Learning between the academy and schools must be a dynamic, multidimensional process. We must learn in both directions.

There has long been discussion of the 'theory- practice divide' in education. On one level this is a simplistic analysis of a complex problem. Universities do not just 'do' theory and schools are not just in the business of 'practice'. So much valuable educational research does not make its way into schools or classrooms and this paper will explore some difficulties integrating theory, research and practice.

The case will be made for creating ways of building a professional learning culture in schools that bridge artificial divides and encourage deep learning within the profession. We need to explore new ways of sharing our learning within the education arena.

**Do not be too timid and squeamish about your actions. All life is an experiment.**

***Ralph Waldo Emerson***

## **Introduction**

This paper will draw on one teacher's experiences of moving between university and school. It will explore some of the challenges of working in both worlds and efforts to develop a professional learning culture. The particular challenge of sharing learning across the sectors will be explored. Narrative methods will be employed to highlight the nature of the experiences. Laurel Richardson's (2000) suggestion that we should 'write ourselves into understanding' provides a useful base for exploring the experiences. I wrote this paper because "I wanted to find something out...to learn something I did not know before I wrote it," (Richardson, 2000, p. 924). As a classroom teacher there are not many opportunities to reflect deeply about professional practice. Writing and presenting at conferences encourages this. Reid and O'Donoghue's (2001) work on developing teachers as inquirers into professional practice underpinned my work as a teacher educator and a disposition for inquiry is part of me. This paper is reflective and based on current and past experiences in educational institutions. The case will be made for diverse, multi-layered approaches to sharing our understanding of education and

research and for the need for us to find creative ways to encourage the development of professional learning cultures. The main focus will be on the sharing of 'usable knowledge' rather than all research conducted by educational researchers. Lagemann (2008) argues for translational research that can yield usable knowledge. 'Educational problems are, by definition, multifaceted and complex... To be usable knowledge [from various disciplines] must be built into tools that can actually be utilized in practice or policy' (p. 425).

Dede, Ketelhu, Whitehouse, Breit and McCloskey (2009) go further and suggest ways of researching to ensure knowledge becomes usable:

Usable knowledge comes from insights gleaned from research that can be applied to inform practice. Therefore we suggest that scholars not only build theory and complex understanding of issues but also disseminate this knowledge in a way that helps the field access, interpret, and apply these insights. This process of creating and sharing usable knowledge is best accomplished by a community of researchers and practitioners working together, as opposed to researchers developing findings for practitioners to consume. (p. 9)

This paper will be presented as a series of experiences, interwoven with literature providing insights into positive and negative aspects of professional learning and culminating in a series of suggestions for building professional learning cultures and learning across education sectors.

### **Looking at my history**

Two and a half years away from university work or two and a half years back in a school teaching: the same time and different perspectives. In writing this paper I am conscious of being bound by ethical considerations: I am an insider and an outsider; a participant and an observer; an employee and a researcher. The relationship between schools and universities is not straightforward. The traditional theory – practice divide exists and sometimes the two sectors simply don't understand each other's needs. Assumptions are made which need to be challenged by real experience. Relationships take time to build and there is rarely enough attention given to this. It is critical that both sectors work to develop ways of learning together to bring the best out of each other and to share their understandings of the complex process that is education. All university staff would be familiar with the polite suspicion encountered when entering a school. All teachers would be familiar with the sense of questioning, even disdain that can arise when meeting university staff for the first time. 'Ahhh, you're from the university are you...?' In my experience it didn't matter how low key or enthusiastic I was there were some who held that view. Lagemann (2008) notes 'it is widely recognized that teachers and policy makers ignore research' (p. 425). I am not sure that the situation is quite so grim but I do think we need better ways of sharing the research.

### **The university**

A small regional university, which had originally been a college of advanced education, with undergraduate and graduate teacher education programs and an actively growing research culture.

As an academic I was responsible for a graduate secondary teacher education course. Students came to the course from diverse backgrounds, with different motivations to become teachers. We worked together for one year. The course had a focus on developing teachers as inquirers into professional practice and there was constant discussion about the development of a disposition towards professional learning. There were about fifty students each year and about fifteen faculty staff (a mixture of permanent and sessional staff and some practicing teachers). I taught units in Secondary English Curriculum, Teaching and Learning, Curriculum and Adolescent issues. Like all universities the workloads were heavy and the pace very demanding. There were not many formal opportunities or much time for personal reflection on teaching although most people made an effort to engage in some professional conversations. Brydon-Miller, Greenwood and McGuire (2003) note the importance of mentoring and collegial sharing which is crucial to an academic's development (p. 18) and I had some great mentors but sometimes this time for sharing was lost in the busy-ness of day to day life.

All lecturers were expected to conduct research and a particular focus was on building partnerships within our region. Relations between the university and schools were generally positive.

In terms of teacher educator professional development there were various opportunities to contribute to university research and teaching and learning conferences, or higher education teaching qualifications. In reality there were not many conversations about teaching practice- unless an academic was actually researching personal practice.

#### **The school:**

A coeducational, independent school of over 1000 students, based in a regional city and steeped in century old tradition. Two separate campuses, the senior catering for Years 9-12 and the junior catering for kindergarten to Year 8. There has been a laptop program in place for over a decade. Teachers are employed to teach their subjects and they must be involved in the co-curricular program of the school: usually sport for two afternoons and Saturday morning each week.

A few weeks into school life and I reflect that it would be quite possible to forget I had ever been at university. Days pass by in a frenzy of activity and time races. Conversations are always short. Schools are noisy places and people want me all the time. Lessons fly by and I am conscious of having changed. I understand so much more about learning and different learning needs. This constantly holds me up as I try to ensure every child is learning. Meetings occur frequently and they are always rushed. No one asks me much about my university work or research (why should they)? There have been some assumptions made: 'You must be crazy to come back', 'You wouldn't know anything about writing reports now would you?', 'This might be a bit boring...' I don't say much in response. I am in my listening and observing stage! I suppose the teachers are working me out too, in some ways I am viewed with suspicion. I am conscious of being circumspect as we all negotiate the new relationships. The old tensions between 'the university' representing theory, ivory towers, disconnection and schools being where the 'real' work occurs are evident.

Initially trained as a secondary English and humanities teacher, I have worked in schools and at a university. Despite frequent school visits and working with teachers in research projects and as a critical friend after twelve years at university I felt I was losing touch with adolescents. At the conclusion of a doctorate I decided to return to school teaching.

Employed in the middle school (on the junior campus), my roles are English teaching (Years 7 and 8) and coordination and leadership of curriculum and professional development. The school has a Director of Learning and Teaching and Heads of each section. I am told I am middle management, not something I have thought about much before.

As a school teacher my vision is split between teaching English and mentoring young adolescents; leading the English department, and coordinating the curriculum and professional development (PD) in the middle school. The initial brief was to build the English department and ensure all curriculum documentation was up to date. Curriculum coordination involved meeting with the coordinators and ensuring implementation of school goals and documentation and compliance. The professional development role essentially involved managing quite a generous budget and alerting staff to relevant PD opportunities. There is a general expectation that all teachers will be involved in some form of professional development but there has been significant change in the school and this has challenged many teachers.

I had returned to a school with the idea that I would explore the possibility of connecting school and university learning. I would 'live' the connection. With the wisdom of time I see that this was a somewhat naive idea. What actual university learning was I planning to share? Why would teachers be interested in research? How could I possibly make sense of the massive amount of research (and the contested nature of that very research) that has been conducted? What authority did I have to implement anything? A senior research fellowship from the university provided a bridge between the worlds and has given me reason to keep researching and writing. I presented some initial thoughts at the ISATT conference in Canada in 2007 (Brown, 2008) and there was interest from the audience. One comment made me pause: 'This requires courage. You are actually taking the learning back to university too, do you realise? See how we are all listening carefully.'

I realise my interests are not unique and that many academics are concerned about where their research goes (Castle, Fox & O'Hanlon Souder, 2006). For Michael Huberman this was an ongoing preoccupation. As Day (2002) notes:

[Huberman] coined the term 'sustained interactivity' as a means of bridging the gap between knowledge production and knowledge use. [He] defined it as:

Multiple exchanges between researchers and potential 'users' of that research...prior to...during the conduct of...and... during the analysis and write up phase of a study. (Huberman, 1993, pp. 36-37)

Huberman concluded that research is more likely to have a strong conceptual influence on practitioners when researchers are active in the contexts where innovations are in process... (p. 429)

### **Looking at professional learning culture**

My sense of a professional learning culture is one where everyone in the organisation is an active participant in their own learning and contributes to shared learning. There is a sense of energy and engagement in professional practice and there is a genuine interest in professional development. People are interested in asking questions and inquiring into pedagogical issues through informal and formal approaches. There is a disposition for learning in all its possible ways. Clearly this is idealistic but I am familiar with schools where this approach exists.

Ewing and Smith (1999) wrote about a successful school/ university professional learning project that took place over a number of years. They identified the features for developing a professional learning culture: the principal and teachers had built up a climate of professional inquiry about effective teaching; all stakeholders were aware their voices would be heard in the school community; teachers were prepared to work together to go forward and there was a symbiosis of philosophy of commitment and funding.

Holmes (2009) suggests that 'the creation of a learning culture is paramount for good professional learning to take place within any institution. It is always possible to begin this process, or to develop it further, regardless of the effectiveness of the current learning culture within your school.'

A recent Victorian state government 'Inquiry into Effective Strategies for Teacher Professional Learning' notes that:

Professional development is defined as referring to the range of formal and informal activities undertaken by teachers to develop professional knowledge, professional practice and professional engagement.

Professional learning is defined as learning that results from a wide range of professional development activities. (2009, p. 8)

This raises an important distinction. I am not advocating that we simply work on developing a professional development culture. The focus must be on developing the professional learning culture. We need to ensure that any form of professional development (formal or informal, including formal study) actually translates into enhanced practice in the classroom.

There has been extensive research into professional development and its effectiveness (Borko, 2004; Clark, 2001; Garet, Porter, Desimone, Birman & Suk Yoon, 2001; Lieberman & Pointer Mace, 2008) and there has been a rise in collaborative models of professional learning such as professional learning communities or teams. In Victoria in 2005 the Department of Education and Training produced the 'Professional Learning in Effective Schools: The seven principles of highly effective professional learning' document which has paved the way for extensive changes in the way professional development is

conducted. The focus is on student improvement and teachers working collaboratively (using data and research) to improve practice and enhance learning outcomes.

Teachers from within the system will have to comment on whether this model has produced a professional learning culture.

Critics of traditional professional development models are consistent. Borko (2004) in a detailed analysis of professional development and teacher learning identifies that:

‘Despite recognition of importance, the professional development currently available to teachers is woefully inadequate. Each year, schools, districts and the federal government spend millions, if not billions, of dollars on in-service seminars and other forms of professional development that are fragmented, intellectually superficial, and do not take into account what we know about how teachers learn... (p. 3).

Lieberman and Pointer Mace (2008) suggest that often professional development is perceived by teachers as being idiosyncratic and irrelevant (p. 226). Garet et al (2001) comment that ‘traditional forms of professional development are widely criticized as being ineffective in providing teachers with sufficient time, activities, and content necessary for increasing teachers’ knowledge and fostering meaningful changes in their classroom practice’ (p. 920). Perhaps most importantly Clark and Florio-Ruane (2001) cited in a review by Temple Adger (2002) note that ‘one of the reasons that teachers often find formal professional development disappointing [is that] they are positioned as clients in need of fixing, not owners and managers of the programs that ostensibly aim to support their learning; and initiatives are often superficial- short term and insufficiently sensitive to complex local conditions’ (p. 26).

In the United States the situation seems particularly difficult as the ‘No Child Left Behind’ policy requires that teachers learn to follow a script and ‘instead of building a culture of professional learning, teachers are faced with a “culture of compliance”...teachers are given a “one size fits all” set of professional development workshops. (Lieberman & Pointer Mace, 2008, p. 227). (In Australia it would be well to pay particular attention to how we plan to implement National Curriculum initiatives.)

They go on to argue for a ‘learning community’ model based on networks and partnerships which has been implemented across the world (from as early as 1974 with the National Writing Project model in the USA). The value of networks is that they ‘helped to create *practitioner knowledge* (from teachers’ experience), *public knowledge* (from research and theory), and *new knowledge* (from what was created together)’ (p. 229).

Borko (2004) also suggests that there is a full research agenda ahead needed to guide professional learning policy and practice. Garet et al (2001) note that ‘Despite the size of the body of literature, however, relatively little systematic research has been conducted on the effects of professional development on improvements in teaching or on student outcomes’ (p. 917).

**How did I think I could develop a professional learning culture and what did I have to share?**

A doctorate around teacher learning; coordination of a teacher education course based on teachers as inquirers into professional practice, a product of the 'teachers as lifelong learners' era all make me who I am. I am interested in helping teachers develop a disposition for exploring professional practice and regard for research: through learning about others' research and conducting their own inquiries into their practice.

### **What do we have in terms of professional learning and what is my role?**

I do not take credit for the establishment of a focus on professional development in the school: that was well established before I arrived. There was a clear strategic direction that supported professional development for staff and this had been developed through formal and informal processes. The first day of each term always involves some form of professional development, often through the presentation of material from an outside speaker. Teachers have also been encouraged to participate in learning networks. This involves people from outside (sometimes from universities) coming to observe classes and work with teachers on key issues.

There has been extensive encouragement to attend professional development opportunities- often in the form of one day or short courses or conferences. My role is mainly administrative but I am particularly interested in finding out people's personal professional development needs.

Perhaps the key development has been the Master of Educational Studies that was introduced in 2008. This is a shared initiative between the school and the university and is a perfect example of a congruence of needs- or symbiosis. The school was keen to increase the intellectual capital and discipline knowledge of staff and saw Masters certification as a good way forward. The university had revised its Masters program and was keen to build numbers. A program was designed that would involve two years of study; the first involved regular in-school workshop/ tutorials run by university staff; the second year saw the research and writing of a minor thesis. Twelve teachers enrolled in the course and the school and university each provided scholarships to cover one third of the cost of the degree. I have acted as a conduit between the university and the school. My knowledge of both systems has been useful and I have tried to smooth the way for all parties. I cannot comment in detail on the program at this stage as it is still being conducted. I am supervising two of the theses and this has been personally very engaging. This model is not unique to the school (Wood & Anderson, 2003) but it makes sense to build this type of experience and it has added another dimension to the professional learning culture.

An initiative this year has been the further implementation of the Teaching for Understanding framework (Perkins, 1993). This was part of the Operational Plan for 2009 and most departments were given a university partner- or other 'expert'- to help teachers learn the model. The department teams (Year 7-12 teachers) have met once or twice each term to learn a new element of the framework. The 'expert' partner leads the learning and then observes a teacher taking a class using the particular element. This lesson is also filmed and the other department members meet with the teacher and

expert to analyse the event. I have a role as a learning partner for the Humanities and Business Studies group. In addition I have had my teaching observed by the outside English learning partner.

Secondary teacher meetings are one area that I have initiated in an effort to build the professional learning culture. We meet once or twice a term as a team of about twenty-five. The aim is to have a place for sharing of learning from professional development activities; to experience different learning strategies and to have substantive conversations about our own learning and teaching. These have only started this year and while there was initial resistance from some teachers ('not another meeting', 'who instructed you to have these...?') they have provided a place for some tentative beginnings at building a place to talk about teachers' learning. I have included a reading in each of these meetings but discussion is always rushed and I have a sense of unease about the process.

We are very fortunate in the English department to have planning meetings at each year level each fortnight where we work as a team to plan the program. In addition we have regular department meetings where administrative issues and our whole department planning, approaches and policies are discussed. The English team has varied over the past three years. It comprises some early career teachers and some teachers with twenty or more years of experience. In many ways it has been much easier to establish a professional learning culture with this smaller group. The more recent graduates are keen to learn and are clear about their responsibilities in terms of ongoing learning. They provide a catalyst for action and their questions often result in detailed, valuable pedagogical discussions. I have encouraged all teachers to attend at least one English related PD opportunity each year and it has been valuable to attend the English association state conference together. Last year we all participated in the English Writing Project where we participated in ongoing professional development with a university mentor. We also share journal articles and discuss them. A recent initiative was where a colleague and I presented a workshop on 'Identity, cyber- identity and cyber-safety' at an English conference. We worked collaboratively and closely and we both learnt from the experience. I try to model the different ways of learning. There is no doubt that conference presentations force us to crystallise our thinking!

### **Looking at professional learning opportunities**

'New' models of professional development involve 'mentoring, observation and coaching; local study groups or networks; teacher academies that offer ongoing seminars and courses of study; school-university partnerships that sponsor collaborative research; interschool visitations; and a variety of informal learning opportunities developed in response to teachers' and principals' felt needs' (Darling-Hammond, 1997, p. 325).

Garet et al (2001) claim that professional development activities that have positive impacts on teachers' self-reported increases in knowledge and skills and changes in classroom practice have three core features: (a) focus on content knowledge; (b) opportunities for active learning; and (c) coherence with other learning activities.

### **Shining eyes or factors that encourage professional learning and the sharing of academic research**

Teachers who are naturally and enthusiastically interested in professional learning are the greatest assets in developing a professional learning culture. These people can be connected and encouraged to participate in projects and to build a critical mass of people interested in substantive conversations about teaching, learning, curriculum and so on. All schools have some people who fill this role. It has been interesting to observe the Masters cohort at school and listen to their conversations developing. Over time they have developed confidence and knowledge and some are keen to discuss their research.

Wood and Anderson (2003) note that teachers in the first three to five years of their careers are most open to continuing professional development opportunities (p. 22) and while I have anecdotal evidence to support this I don't believe it is always the case. There are teachers of all ages interested in development and one of the crucial issues for us to consider is how to engage all teachers in ongoing learning.

Factors that encourage professional learning include opportunities for active learning and group participation (Garet et al, 2001) and social interactions (Liebermann & Pointer Mace, 2008); a well established culture of trust (Borko, 2004; Hargreaves, 2002); effective partnerships between universities and schools (Castle et al, 2006) and professional learning that is not just for policy implementation (Giles & Hargreaves, 2006). The concept of professional learning communities has been adopted all over the world 'as a way of meeting the challenges of improving schools in this fast-changing global society' (Liebermann & Pointer Mace, 2008, p. 233).

Time and money are natural enhancers for developing a professional learning culture. In themselves they do nothing but as part of a planned professional experience they are helpful. Often money used to release teachers to participate in professional learning is the key. Garet et al (2001) note that a major challenge to providing high quality professional development to teachers is cost. (p. 937). Giles and Hargreaves identify the importance of giving teachers time to talk (p. 190).

The real challenge is achieving the balance that Borko (2004) notes:

To foster [effective professional learning] discussions, professional development leaders must help teachers to establish trust, develop conversation norms that enable critical dialogue, and maintain a balance between respecting individual community members and critically analysing issues in their teaching (p. 7).

### **Glazed eyes or factors that inhibit the development of a professional learning culture and the sharing of academic research**

This may be blunt but there are two things I firmly believe about teaching. If you don't want to learn then don't become a teacher. If you don't like young people then don't become a teacher. My observation is that a lack of interest in learning and young people has led to very disillusioned teachers and disengaged students. Young people need to see adults who are enthusiastic and involved in their

own learning and passionate about their teaching. I have heard Andrew Fuller say 'adults need to have fun for kids to want to grow up'. I think that teachers need to love learning for kids to want to be inspired to learn too.

Lack of time is consistently cited as the reason that teachers don't engage in professional development. Schools are intensely busy places. There is constant tension between the immediate concerns of teaching; the responsibilities to students and colleagues and the longer range value of professional learning (Giles & Hargreaves, 2006, p. 148). Lack of time is also a reason that teachers may not want to participate in research. What may be one simple interview for a researcher may be a major imposition on a busy teaching day. It may take place in the only spare period a teacher has. Many teachers are interested in participating in research but it is important to appreciate how significant the demands may be.

The quality of professional development opportunities has caused some teachers to avoid attending. Teachers don't want to leave their classes, their core business, to attend what can often be disappointing or irrelevant PD sessions.

The responses to the criticisms of professional development have led to new models of teacher professional learning. There are some interesting and subtle issues at play. We have seen the rise of collaborative learning models that encourage teachers to work together in different ways. In the UK there has been the Professional Development School model of teacher education (Castle et al, 2006); in Victoria the government has developed the Professional Learning Teams model.

At the same time I have not observed universal enthusiasm for collaborative professional learning across the teaching profession. Many people (probably the majority but I don't know) enjoy this type of work and are happy to be involved; some are politely tolerant and some are actively (or passively) resistant. The lack of enthusiasm may be caused by a combination of factors including disillusionment; fear, a lack of interest in learning, the difficulty of access to academic discourse and a sense of betrayal.

Some teachers are comfortable with the way they are teaching and they don't want to be made uncomfortable by closer analysis of practice. I must admit to becoming very frustrated by this attitude and fortuitously a special issue of the journal 'Teachers and Teaching: Theory and Practice' which focused on 'International perspectives on veteran teachers' arrived recently and has proved valuable.

Day and Gu (2009) conducted research with a group of veteran teachers and provide the following insights:

The first message is that there are associations between teachers' commitment and effectiveness. It follows that researchers need to examine what supports and builds and, on the other hand, what adversely affects veteran teachers' commitment...

The second message, for school leaders and those who recruit and provide training programmes for teachers, is that attending to the broader personal well-being of staff- through building trust through genuine regard and sustained interaction- must go alongside the raising of expectations and continuing pursuit of standards.

The third message, for policy-makers, is that to ignore the specific commitment and resilience needs of this large group of veteran teachers is to fail to realise the long-term investment that they and their employers have made to teaching. It is this group which- at least in theory- should be at the peak of their expertise and teaching wisdom. It is this group which should be providing a model for their less experienced colleagues. Rather than fighting off difficult challenges, they should be beacons of hope and optimism for all. That many of them are not is a call to action for those whose stated mission is to improve schools. (pp. 454-455)

Another insight is suggested by Giles and Hargreaves (2006) in a detailed analysis of the difficulty of sustaining innovative schools during standardized reform. They noted that teachers were often unhappy with the reforms being suggested: that the reforms were 'not good for kids'...and 'did not help teachers maintain strong relationships with colleagues either'. The emotional dimension of being a teacher cannot be underestimated (Hargreaves, 1998; Brown, 2003) and 'some [teachers] talked about how the fun and creativity had gone out of their work; about feeling angry, unappreciated and not valued. Endless negative media characterizations along with policies that seemed to promote little learning or growth for teachers, made teachers feel cynical and disillusioned' (Giles & Hargreaves, 2006, p.149).

Borko (2004) notes that 'meaningful [teacher] learning is a slow and uncertain process for teachers, just as it is for students. Some teachers change more than others through participation in professional development programs...Further, some elements of teacher knowledge and practice are more easily changed than others...' (p. 6). So teacher learning is part of a complex process and there are no models of professional development that will appeal to all teachers.

Most teachers are happy to talk about their work and share their experiences but it is difficult to look deeper. Borko (2004) notes that 'discussion that supports critical examination of teaching are relatively rare. Such conversations must occur, if teachers are to collectively explore ways of improving their teaching and support one another as they work to transform their practice.' (p. 7). The challenge to critically examine practice can be threatening and demanding. Wilson and Berne (1999) suggest that 'the norms of school have taught [teachers] to be polite and non-judgmental, and the privacy of teaching has obstructed the development of a critical dialogue about practice and ideas' (p. 186). They go further and identify culture of anti-intellectualism in American schools that 'might seep into professional development opportunities, unless those opportunities are designed to counter that trend' (p. 193).

Another element that can reduce teachers' willingness to be involved in professional learning or research around their teacher knowledge comes perhaps from a fear of exposure of lack of knowledge. As Wilson and Berne (1999) note, 'to document what teachers know, one must assess knowledge. Some of the assessments might look like, or at the very least look like Tests. Even if assessment is done in an interview, it can still feel like an examination' (p. 201). While this may be farfetched I wonder if this is at the root of some resistance to teacher learning.

There is a major dilemma for education researchers wanting to disseminate their research. Most research is reported in print text and one has to be able to write in a particular way for publication. Journal articles, which form one of the main ways of sharing research, are often lengthy and not

necessarily straightforward. The style may automatically alienate teachers who don't have access to or interest in academic discourse. This then causes difficulty of transferability or translatability of research findings. The same problem can occur in conference presentations. There is a language of academia which is different from the language of school and I am constantly reminded of this in my day to day work. It is not that teachers cannot learn the discourse (the Masters cohort is evidence of this) but the issue is whether they want to. I do not want to characterize teachers as in any way incapable of this type of reading and learning but it is a significant blocker to sharing knowledge. I am also aware of all the good writing that is done by academics and I do not want to criticize that. The challenge is for academics to think this dilemma through and find ways of writing that are challenging and accessible.

Another dimension that can influence teachers' attitude to their professional learning and their work more generally is what Hargreaves (2002) identifies as the concept of betrayal, the opposite of trust. Teaching is emotionally very demanding and teaching relationships can be intense. The focus on the development of collaborative approaches to learning can highlight some of the tensions that exist between people in an organisation. (Collaborative relationships require the development of trusting professional relationships). Hargreaves (2002) suggests that 'one of the challenges facing educators who try to build collaborative relations among their teachers is the difficulty that teachers encounter in dealing with conflict'. Teachers typically avoid conflict by establishing norms of politeness and non-interference, or by clustering together only with like-minded colleagues who share their ideas and beliefs (Fullan, 2001; Hargreaves, 2002). This reduces teachers' capacity to work through differences and learn from disagreement (p. 394).

Most cases of betrayal in organizations are minor. Broken promises, missed appointments, gossiping, time-wasting and self-servingness- these are the stuff of minor betrayals, and most are unintentional products of being over-worked rather than conscious acts of deception. Yet, as acts of distrust accumulate and people feel repeatedly let down, minor betrayals can create crises of trust in the organization generally. (Hargreaves, 2002, p. 398)

The result of betrayal (as Hargreaves describes) could be one reason that some teachers do not engage in professional learning more enthusiastically:

After intense or repeated experiences of betrayal, teachers tend to withdraw to their own classrooms, stay away from difficult colleagues, avoid interaction with them, and distance themselves psychologically from what they are experiencing. Betrayal creates negatively experienced conflict. The danger is that teachers then avoid any kind of conflict, or the interactions that might lead to it, altogether...Intense or repeated betrayals break the bonds of professional interactions and social belonging that make professional community possible. (Hargreaves, 2002, p. 404)

### **Looking at what has changed or the intensification of teachers' work ...**

#### **My situation is not unique**

In May, I am responsible for the smooth operation of the NAPLAN tests at Year 7. This is somewhat ironic for someone who was opposed to this type of testing. The materials all arrive carefully packaged but quite a bit of time goes in to preparing the timetable for the tests, briefing teachers, ensuring

parents are informed and so on. Regular classes are missed as students spend five or so hours on these tests. There are curriculum implications for this. I am amazed to find myself fixated on pencils, rubbers, piles of tests...collecting them, chasing people for signatures and so on. I have attended a number of meetings on analysis of test results. There is much still to do with this material.

At the end of each unit we teach, we collect student evaluation feedback. This is always interesting and sometimes funny. We try to vary the type of feedback we seek as sometimes I sense some student boredom with continually giving feedback. I felt that sense with university students too. I worry, too, about what is done (or not done) with all this feedback. There is not much time for detailed analysis.

Every teacher in my school must complete ten hours of ICT related PD each year. This is admirable and in many ways essential but I spin through my own training, whilst encouraging others. This year I have learnt about a new Learning Management System; more about a new Data Storage System; spent countless hours developing 'expertise' with the interactive whiteboard; developed Wikis for the year 8 reading groups; created multimedia presentations for various audiences; developed a Digital Citizenship and Cybersafety program for year 7 and tried not to drown in the fifty to eighty emails I receive a day.

As a teacher, returning to the classroom, something profound has changed. Children are still funny and thoughtful and interesting and frustrating as always and teaching is absolutely precious and rewarding but I feel my attention is distracted. We are so busy all the time. There is no space for thinking. We hardly sit down at lunchtime and the old conversations I used to have about kids and learning seem to have diminished. Teachers have always been busy. The difference is that now they are busier, more accountable and required to integrate professional learning and technology into their teaching lives. Nothing has disappeared from the workload to make room for the newer demands. We need to concentrate more on what we can let go from old ways of operating.

### **Social changes**

There is a very real feeling that schools are expected to do more to ensure the social development of their students. This has been growing over the decades but I am acutely conscious of our responsibilities to help students develop into resilient adults. It is not just the domain of the welfare team or the priest or psychologist. Curriculum decisions have to be made. Do we need special programs? Do we need to integrate social development more broadly or explicitly across the curriculum?

### **Imperative for professional development**

The concept of lifelong learning is relatively recent (Day, 1999) and it has changed the nature of teachers' work. In the past teachers would attend professional development activities to 'keep up to date' on educational issues. Some teachers were PD 'junkies' and others managed to avoid participating. There was a sense that qualified teachers knew what they were doing and should be trusted to get on with the job.

A range of factors can enhance and inhibit teacher professional learning. The relationship between schools and universities is one area that has had been the focus of extraordinary efforts to build bridges.

Castle et al (2006) in describing professional development schools in the US include an ideal image where there is collaboration between the school and the university with the purpose of creating a collegial environment where teachers, teacher candidates, and students learn from each other; where there is a 'two way relationship, not just benefiting the university and not just benefiting the school' (p. 76).

## **Learning in both directions**

### **What do schools have?**

They have real students, real teachers, real classes. They are a workplace for teachers, a research site for researchers.

They are a genuine source of data for all manner of research projects. Students and teachers and parents can be surveyed, interviewed, observed. They can be research participants or research subjects. They can provide data for statistics or their voices for qualitative research.

Schools are the places where government education policy is implemented. Teachers are the people who ultimately have to make this happen.

Schools are places of relationships. People work in close proximity and see each other regularly. Teachers are expected to know about young people as learners and people; and teachers as colleagues and co-learners.

Teachers have pedagogical content knowledge and discipline knowledge and their responsibility is to their students' learning.

Schools have some access to funding for research. Some schools have a particular interest in researching elements of the organisation.

The landscape of schools is changing though and there is an increasing imperative to test and to be judged on results.

### **What do universities have?**

Universities have an imperative to research and many reasons to look closely at all elements of the education system and educative process. The economic survival of universities in Australia is dependent on the funding derived from publication of research.

Researchers in universities have insights into ways of researching and a big-picture awareness of educational policy, issues and research. Most university researchers have skills in collecting and analysing data and a genuine interest in learning from research.

Universities also have funding for research. The amounts vary and the rules vary. Some academics are purely researchers and there are usually funded post-graduate students genuinely interested in research. Universities also have well developed structures and resources for research- they have research offices and networks; ethics committees, large libraries and so on.

Much research is funded by governments or other bodies to provide information for policy decision making and (the cause of some tension) universities are required to implement government policy in the area of teacher education.

Universities have people interested in education, teacher preparation and learning. They are also sites for the acquisition and generation of discipline knowledge.

Universities are the providers of much professional development for teachers- from their roles as experts, or in formal and informal connections.

Masses of work has been done building bridges between schools and universities and many programs have been successful to varying degrees. Many of the projects provide ways of connecting schools and universities but many still rely on positioning university people as 'critical friends' or 'experts'.

### **Looking at research in and on schools**

We are living through a time of extraordinary data collection and 'knowledge' generation. Schools now conduct 'satisfaction' surveys. Some are mandated by government, some are conducted to provide information to the school for other reasons. Students are surveyed. Teachers are surveyed. Parents are surveyed. I wonder about the ethics of some of this data collection. I wonder how often schools consider students' well being in relation to the questions they are asked. In Victoria school satisfaction data is made publicly available. According to 'The Age' on Saturday 26<sup>th</sup> September, 2009, the federal government is now developing mechanisms 'in which information about every school in Australia- including national test results, staff and student numbers, and socio-economic profile – will be published. The information is due to be published online by the end of the year (p. 7).' I wonder what we are going to do with all the data.

There seems to be a stronger focus on research into schools. Schools want information about what is happening within them; governments want to know more about what is happening in schools; universities and youth support agencies do too. Universities need to publish research and grants for research are vital for their survival. Research in the past often focused on gaining data to inform policy or program development.

More teachers are taking higher degrees. Sometimes these qualifications require school based research or practice based research. In addition, teachers are increasingly encouraged to investigate their own practice and informal research is conducted in classrooms.

Schools are inundated with requests to conduct research. We have established a School Research Committee to keep track of the various requests. It consists of our Director of Teaching and Learning, our school psychologist and me. Our role is two-fold: We review requests to conduct research and we

monitor the impact on students and teachers. We are concerned that the students are not over-researched; that they do not miss too many classes to complete surveys, participate in interviews and focus groups. We are conscious of the importance of schools as research sites but we need to work out ways to balance the competing needs of researchers and schools. Sometimes the researchers are teachers within the school and that raises issues too. (This may be the focus of some later research). Or in my case I am a supervisor, teacher, PD leader and researcher all at once.

### **Looking for research to go somewhere and learning in multiple directions.**

I wander through university libraries, and now online resources, and I am so conscious of all the research that has been conducted throughout the world. Some of it sits on shelves, neatly bound into dissertations or journals; some is in cyberspace; some of it made its way to government and policy and may have been translated into practice; some of it languishes in files of incomplete, not published, or rejected work. Some of it sits in people's minds as gentle memories of interesting work; or unpleasant memories of frustrating work. All of it has taken time to create; time that is so precious in educational institutions. All of it plays some part in the teacher learning and 'change' agenda. Most of it has the capacity to make humans feel empowered or vulnerable to some degree.

I sit at conferences listening to people speak and sometimes the work is very interesting. Sometimes it is well presented. Sometimes it is neither. I have wondered for years about how research is shared. I wonder particularly when people don't want to read academic journals; or when presenters are so uninspiring. It amazes me that we know so much about how people learn- and so much of my time as a teacher is taken up with thinking about student engagement- and yet so much professional learning requires endless listening. Some presenters are excellent- and I don't want to criticize them. It is just interesting to see whether researchers actually care about presenting their work in an engaging way. The same can be said for teachers who are uninspiring. They may be passionate about their subject matter but if they cannot connect with students in some way it is unlikely that engagement in learning will occur for students.

#### **1. Care in research of and with teachers**

Research into effective professional learning consistently shows that collaborative work is valuable and that time is needed to build trusting relationships where all parties can be developed. I would argue that an ethic of care needs to underpin our interactions across the educational sectors as I believe a lack of care in interactions across sectors and the research process can be extremely damaging.

The idea of care-full research is one that developed over time. It needs to be understood in the sense of 'full of care'- hence my spelling. It developed from the feeling that some research seems to lack care for the participants and the data they provide is merely material for the researcher to use in any way he or she chooses. Care-full research clearly identifies the relationship between the researchers and participants as central to learning. It values the dialogue within the relationships (Ellis & Bochner, 2000) and supports the idea that research is something that should be 'useful' for both the researcher and the

participant. Care-full research is respectful of what is shared and 'given' as data. It is attentive to the whole research process and it focuses closely on what is being said. It is tactful, thoughtful and reflective and as such has some larger purpose. Care-full research has pedagogical implications; it has the potential to transform the practice of the researcher and possibly the participants.

On one level research data can just be seen as words on a page or words on a recording. In another the words are jewels, gifts, bequests from the participants and as such they need to be treated with care. To read words 'care-fully' is to read with sensitivity. It is reading to understand more of the participants' lived experience and to honour the stories being told. Part of this includes avoiding making assumptions about what is said, or rushing to conclusions that might fit the research question but not the person telling the story. It is about developing a mutual respect for each other and sharing that learning.

Building a professional learning culture relies on a 'care-full' approach to teacher learning.

## **2. Just in time learning for teachers**

Jamie McKenzie has long been an advocate of 'just in time learning' in relation to technology learning (2002). For teachers' professional learning the notion of 'just in time' fits neatly with a busy life. The rise of the internet has made information so accessible. There are so many options for researchers to share their work- and so many possibilities for teachers to find this work. The difficulty now is the time taken to trawl through all the material and the need to critique every website very carefully. The days of solely relying on trusted academic publications are long gone. A contemporary professional learning culture embraces the multitude of ways teachers can find information in an online environment.

It is interesting to consider the place of technology in blurring boundaries and breaking the rules of the academy. In contemporary research there is a dilemma: if you made some absolutely extraordinary discovery would you wait for the process of publication and march to the time of the academy? Would you share it in the media? Would you post it on your website or blog?

We would all be familiar with the many excellent resources available on line for teachers. Examples such as the Carnegie Project, where teachers take an active role in sharing practice through making multimedia representations of their teaching, are inspiring and profoundly useful. See [InsideTeaching.org](http://InsideTeaching.org) for an amazing professional learning resource (Liebermann & Pointer Mace, 2009).

Interesting epistemological questions abound in relation to online information. Whose knowledge are you using? Who owns it? Where did it come from? This is a challenge to traditional models of teaching, researching and disseminating research. Traditional boundaries are gone and we need to work in new ways. The conventional notion of 'academic expert' can be seriously challenged when one views some of the sophisticated work done by teachers all over the world.

### 3. Real and Virtual mentoring

Another profound value of technology is the capacity to find like-minded people via the internet. We can make contact with people via email or social networking (in all its forms) and we can have ongoing conversations about our work in ways that are new to our times. The internet has democratized and broadened immeasurably our capacity to learn from and with others.

Research into professional development consistently shows the value of mentoring in teacher development and learning (Garet et al, 2001). This has subsequently been implemented through programs such as the Victorian Institute of Teaching mentoring program for beginning teachers.

I would like to argue for a more subtle and complex understanding of mentoring in education. Mentoring involves a relationship between two people. It can be formally or informally arranged (Lacey, 1999) but it should be based in an assumption that both people will benefit from the relationship in some way. The relationship connects two people who learn from each other (Clark, 1995; Walkington, 2003). Another important aspect of mentoring is communication and as Witherell and Noddings (1999) note, “a caring relation also requires dialogue...time is required for such dialogue” (p. 7).

When I started teaching I was surrounded by a whole department of experienced teachers who went out of their way to introduce me to the profession. We talked endlessly at lunchtimes about pedagogical issues and practices. They helped build my content knowledge and they shared their tips for managing a hectic life as an English teacher. As a course coordinator at university we changed the traditional ‘supervision’ model of professional experience to a mentoring model. I was very conscious of my role as a mentor to the students and I put in many hours working with fledgling teachers as they embarked on their profession. I was aware of some outstanding mentoring occurring in schools and I was aware of very pressured teachers who barely had time to ‘supervise’ or ‘mentor’ students.

My experience back at school is that I constantly feel pressured about not having time to properly mentor people for whom I am directly responsible. I try but often feel inadequate. Mentoring requires time and a capacity to listen and give of yourself: all things that can be difficult when under pressure.

The concept of mentoring is challenging in teaching. We know it is invaluable and a powerful way of learning but it requires time to build relationships and time to actually mentor. The intensification of teachers work seems to have reduced the time for traditional styles of mentoring,

There is an argument to develop different models of mentoring. We could cleverly use technology, and retired teachers. Virtual mentoring can be a valuable way of encouraging two way learning (Brown, 2005) in teacher education and it could be developed further within schools. I am in regular email contact with many former students and the emails are a mixture of news and professional discussion. Their questions and comments always make me think:

[Three months into the job]

'Good news; I love teaching. I also absolutely love the town. The kids are amazingly fantastic and the teaching, although hard, is so enjoyable and rewarding. I can't explain how much I love the kids and the teaching. I haven't felt like I don't want to get out of bed to go to work... It was so nice to get some good feedback [from the principal]. That's one thing I'm really noticing about teaching; it's very solitary.

[Second year of teaching]

I am absolutely devastated. How can teachers be so cruel to each other? I have been working hard to get all the marking done and have been staying until 6.30 so I don't have to take work home. The new AP has got it in for me for some reason and came in the other night and told me to go home and get a life, that teaching wasn't meant to be like this. OK for a Maths teacher to say- I teach VCE English. Anyway, that coupled with some other incredibly bitchy stuff is really making me think I am not cut out for this job... What do you think I should do?'

I replied with supportive comments and asking the teacher to think about the AP's motivation for saying this. Maybe he was trying to be helpful? Maybe critical? It certainly made me think about how we support early career teachers. Our emails have continued and the teacher finally has an ongoing position.

We know we have an ageing population and that there will be many teachers retiring in the near future. I wonder if we could harness some of their expertise and knowledge and set up structures where they formally mentored early career teachers. It could be a two way learning exercise. New teachers could have a profound induction into the profession and discipline knowledge built and retired teachers could have opportunities to contribute to the profession and maybe schools without having the day to day demands of teaching. This additional support could even help with our serious retention problems within the teaching profession.

#### **4. University and school partnerships that work together to meet the needs of all participants.**

There have been many successful partnerships between schools and universities (Ewing & Smith, 1999). The reality is that these projects cannot all be long term and ongoing as they are just too time intensive for all. The learning is powerful and affirming but ultimately unrealistic- so are there different more subtle ways of collaborating? Perhaps we need to consider smaller projects or a having a few academics associated with particular schools. We need to take advantage of learning relationships that are developed in one research project and build on them into another.

It is important to consider the relationships going both ways- school teachers in learning relations with teacher educators- maybe they could be co-researching; sharing insights together and opening classrooms to each other.

## **5. Embedded academics and teachers**

We need to be inside an organisation [school and university] to feel it, to understand the rhythms and the pressures and this needs to be considered carefully as we build stronger relationships. Without direct experience we can really only make assumptions or interpretations about how an institution works. Many teachers have worked in universities on sessional contracts usually in teaching method areas. Schools of education clearly appreciate the value of 'real life' experience. My concern is that it is quite possible for teachers to come in to university (often at the end of a busy school day), teach their classes and go. They miss the informal discussions about teacher learning; they may not be adequately mentored; sometimes they don't have a deep appreciation for the theory underlying their teaching and can reinforce 'anti-theory' notions. On the flip side, university staff can work in schools in different ways; as advisors, critical friends, team teachers occasionally and so on. My experience again is that these events while interesting, and often useful, are still artificial. You get a sense of how a school runs and you see how busy people are but you don't really KNOW!

My suggestion is that we consider 'embedding' academics in schools. Give them medium term teaching roles in a school to help them really understand what is happening and what the issues are for teachers. We could also embed teachers in universities and give them the opportunity to help develop teacher education programs, and understand the difficulties facing teacher educators. A requirement of being embedded could be to contribute to professional learning in the organization.

One advantage of this model is that it could challenge the culture of criticism that exists across all sectors of education. Secondary teachers complain about primary teachers' inadequate teaching; university lecturers wonder what their students have been taught at school. We need to consider developing flexible arrangements where these movements across sectors can occur smoothly.

## **6. Creating new positions in schools**

There is a problem that teachers with academic experience who return to schools often go into senior positions, some with no teaching load at all. So while they can feel the pulse of the school as an organization they still don't have a sense of what happens in the daily life in a classroom. They need to be in a position to actually build relationships with students to find out how they are learning and thinking. This is a common dilemma in education when moving into administration and out of the classroom causes a real and serious disconnection.

Some schools have developed research leadership positions within them, and many have developed teaching and learning leadership positions. Certainly in Victoria there has been a move to create different roles for teachers: such as Educational Leader- Professional Learning or Student Learning and Engagement or Accountability and Operations. I think there is a case for developing combined research and teaching positions where the different discourses and experiences can be brought together and shared.

In my current role there is an interesting challenge: if I share my concerns, reflections and inquiries with colleagues it can be construed as weakness or can even destabilise some teachers who have a

traditional respect for 'expertise'. By the same token, if I model something different in my practice it can be construed as arrogant or pretentious by others. Encouraging movement across the sectors can be difficult but would ultimately be worthwhile.

#### **7. Development of professional learning culture that involves reading, talking and thinking together about learning and teaching.**

As a result of the increasing busy-ness of teachers' days the role of reflective practice is seriously at risk. It is imperative that educators fight for time for this to be a priority.

Building a reading culture is extremely important in education. School teachers and librarians spend huge amounts of time encouraging students to read. It is equally important that teachers also read (Wilson & Berne, 1999). There are various models of professional reading that have been developed and the first thing is to encourage an expectation that learning from reading is valuable and worthwhile.

One model of Professional Reading Circles (Brown & Hayes, 2000) was developed as part of a teacher education course and involved small groups of students meeting to discuss academic articles that they had chosen. The unit lecturer, with the intention of having a mix of gender, age and teaching method in each group, assigned the groups. Each member selected a recent article or book chapter, designed some probing and reflective questions relating to it and led a group discussion about the article. All group members were expected to read the article and prepare responses to the questions prior to the discussion meeting. This model is yet to be successfully implemented at school but I am confident that a version of it will develop in the near future. A number of interested people are planning to develop a breakfast reading group.

In classes we use wikis for students to 'talk' about their reading and there are plenty of electronic discussion groups in cyber-space. Some people adapt to this type of learning very well, even obsessively and others need real meetings and human contact to help their learning. Collaborative learning is known to be powerful: the medium can be real or virtual or a combination.

Another element to encouraging the professional learning culture is to think about how people are grouped. Wood and Anderson (2003) note the importance of acknowledging differences in groups of school staff and they recommend the practice of 'segmentation'. This is 'the activity of identifying distinct groupings in the workforce, often by age, gender, experience or responsibility and planning their needs in relation to their expected beliefs, attitudes and dispositions towards their professional life' (p. 22). Garet et al (2001) advocate 'collective participation' and highlight the value of groups of people participating in the same learning activity thus providing a forum for debate and improving understanding (p. 922).

**8. Challenge researchers to really think about why they are conducting research and who has the potential to benefit from it.**

This is an area that needs close attention particularly when schools are the sites for the research- and students and teachers are the research participants or 'subjects'. In research ethics applications we have to consider the impact of the research on the participants (in a physical and psychological sense) and identify how the particular research is going to contribute to the current body of knowledge. I think it would be valuable to look more closely at how the research was going to affect the research site (teachers, students, regular programs and so on) and insist on ways of making knowledge transferable and usable.

Schools also need to consider the purpose of informal and formal research they conduct and who will be the beneficiary of such work. This can be a challenge when the research is mandated and the agendas are not completely clear. Schools also need to consider the ethical requirements of any research and the whole issue of coercion to respond or participate deserves further attention. Whatever happens in schools there will always be power imbalances and that can raise difficult ethical issues.

**9. Encourage interaction through models such as post-graduate studies being conducted in schools.**

There is a real value in bringing universities to school to conduct post-graduate study programs. It encourages professional conversations; it reduces the stress on teachers to travel to study; it can challenge assumptions about university teachers and it is a powerful symbol of the value the school is placing on professional learning. There are disadvantages too: the cohort is familiar to each other so may perhaps not challenge each other enough (meeting new people from different organizations is valuable for learning); there may not be extensive interaction between the school and the university in terms of what type of course is needed and taught. There are, of course, interesting possibilities with running flexible models of real time/ virtual time; school based and university based programs – much like some of the distance education models. Perhaps groups of teachers contributing different elements to a larger project would encourage new ways of learning together or post-graduate courses could be taught in a central school with teachers from a number of schools. Sensitivity and care for the learning needs of all participants is an essential requirement. I am constantly reminded of the vulnerability of teachers and the difficulties they face trying to combine enormously demanding teaching roles and study.

**Conclusion**

A professional learning culture takes time and commitment to develop. Learning relationships take time to build and yet teachers and academics are constantly pressured for time. It is imperative that all of us involved in professional learning make providing time for learning a priority. We need to work to challenge old fashioned notions of the theory/ practice divide through developing innovative and creative ways of working together. Perhaps we need to focus more on developing a shared learning agenda rather than being suspicious of each other's agendas, and resentful if one dominates.

I have discovered that once a teacher, always a teacher and once a researcher always a researcher. I have a predisposition for thinking in a particular way and living with discomfort and complexity. In my quest to encourage learning between schools and universities I have encountered exciting possibilities and some challenges. Working closely with adolescents is a privilege; renewing professional relationships with teachers and parents is rewarding. I have had some basic beliefs challenged and have discovered that it is much easier to critique education from within academia.

I wanted to take research back to school and in some ways I have and in others I haven't. I am still on the journey: with eyes wide open and looking in all directions.

## **Bibliography**

- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, Vol 33: 8 , 3-15.
- Brown, M. & Hayes, H. (2000). Professional reading circles: Towards a collaborative model for lifelong learning. In M. Kalantzis & B. Cope (Eds.), *Learning in a human scale: Negotiating global cultures and new technologies*. Melbourne: Common Ground Publishing.
- Brown, M. (2003, June). *An exploration of emotion, intuition and reflection in teaching*. Paper presented at the biennial conference of International Study Association of Teachers and Teaching. Leiden University, Leiden, Holland.
- Brown, M. (2005, July). *Connecting and caring: Towards a mentoring teaching profession. Conference presentation*. Paper presented at the biennial conference of International Study Association of Teachers and Teaching, Sydney, Australia
- Brown, M. (2008). 'Welcome to the real world, I haven't reached those dizzy heights yet' In J A. Kentel & A. Short (eds). *Totems and Taboos: risk and relevance in research on teachers and teaching*. Rotterdam. Sense Publishers.
- Brydon-Miller, M., Greenwood, D. & Maguire, P. (2003). Why action research? *Action Research* 1(9) , 9-28.
- Castle. S., Fox. R. & O'Hanlon Souder, K. (2006). Do Professional Development Schools (PDSs) make a difference? A comparative study of PDS and non-PDS teacher candidates. *Journal of Teacher Education* 57 (1) , 65-80.
- Clark, C. (1995). *Thoughtful teaching*. New York: Teachers College Press.
- Clark, C. (2001). *Talking shop: Authentic conversation and teacher learning*. New York: Teachers College Press.
- Darling-Hammond, L. (1997). *The right to learn: A blueprint for creating schools that work*. San Fransisco: Jossey-Bass.
- Day, C. (1999). *Developing teachers: The challenges of lifelong learning*. London: Falmer Press.
- Day, C. (2002). The challenge to be the best: Reckless curiosity and mischievous motivation. *Teachers and Teaching: Theory and Practice* , 8 (3-4), 421-434.
- Day, C. & Gu, Q. (2009). Veteran teachers: Commitment, resilience and quality retention. *Teachers and Teaching: Theory and Practice* , 15 (4), 441-458.

Dede, C. , Ketelhut, D., Whitehouse, P. Breit, L. & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education* 60 (8) , 8-19.

Ellis, C. & Bochner, A.(2000). Autoethnography, personal narrative, reflexivity: Researcher as subject. In N. Denzin and Y. Lincoln (eds). *Handbook of qualitative research (2nd Ed)* (pp. 773-767). Thousand Oaks, CA: Sage Publications Inc.

Ewing, R. & Smith, D. (1999, September). *Framing a professional learning culture: A case study*. Paper presented at ACSA conference. Retrieved June 20, 2009, from University of Sydney EdFac: <http://alex.edfac.usyd.edu.au/LocalResource/Study1/Curl>

Garet, M. P., Porter, A., Desimone, L., Birman, B. & Suk Yoon, K. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal* 38 (4) , 915-945.

Giles, C. & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Educational Administration Quarterly*, 42 (124) , 124-156.

Hargreaves, A. (2002). Teaching and betrayal. *Teachers and Teaching: Theory and Practice*, 8 (3-4), 393-408.

Holmes, E. (2009). 'Your ideal learning culture; turning blue sky dreams into reality'. *Teaching Expertise*. Retrieved June 29, 2009, from, <http://www.teachingexpertise.com/e-bulletins/your-ideal-learning-culture-turning-blue-sky-dreams-reality-4043>

Huberman, M. (1993). Changing minds: the dissemination of research and its effects on practice and theory. In C. Day, J. Calderhead and P. Denicolo (Eds). *Research on teacher thinking: understanding professional development*. (pp. 34-52). London: Falmer Press.

Lacey, K. (1999). *Making mentoring happen: A simple and effective guide to implementing a successful mentoring program*. Warriewood, NSW: Business and Professional Publishing Ltd.

Lagemann, E. (2008). Comments on Bulterman-Bos: Education research as a distributed activity across universities. *Educational Researcher* , 37, 424-428.

Lieberman, A. & Pointer Mace, D. (2008). Teacher learning: The key to educational reform. *Journal of Teacher Education* , 59 (3), 226-234.

McKenzie, J. (2002). *Just in time learning technology*. Washington: FNO Press.

Parliamentary Education and Training Committee. (2009). *Inquiry into effective strategies for teacher professional learning*. Melbourne: Victorian Government Printer.

Perkins, D. (Fall 1993). Teaching for Understanding. *American Educator* .*The professional journal of the American Federation of Teachers*, 17 (3), 8, 28-35.

Richardson, L. (2000). Writing: A method of inquiry. In N. Denzin & Y. Lincoln (eds), *Handbook of Qualitative Research (2nd Ed)* (pp. 923-948). Thousand Oaks: Sage Publications Inc.

Temple Adger, C. (2002). Professional conversation and teacher learning. *Educational Researcher* ,31, 26-28.

Walkington, J. (2003, Feb). *Mentoring pre-service teachers - demands of participation in a partnership of mutual benefit*. Retrieved February 2, 2005, from Unicorn On Line - Australian College of Educators.

Wilson, S. & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.

Witherell, C. & Noddings, N. (1991). *Stories lives tell: Narrative and dialogue in education* . New York: Teachers College Press.

Wood, D. & Anderson, J. (2003). Towards the learning profession. *Management in Education* , 17 (4), 21-24.

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