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Cultivating Teachers' Beliefs, Knowledge and Skills for Leading Change in Schools

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Abstract: Australian policy initiatives and state curriculum reform efforts affirm a commitment to address student disengagement through the development of inclusive school environments, curriculum, and pedagogy. This paper, drawing on critical social theory, describes three Australian projects that support the cultivation of teachers' beliefs, knowledge and skills for critical reflection and leading change in schools. The first project reports on the valued ethics that emerged in pre-service teacher reflections about a Service-learning Program at a university in Queensland. The second project reports on a school-based collaborative inquiry approach to professional development with a focus on literacy practices. The final project reports on an initiative in another university in Victoria, to operationalise pedagogical change and curriculum renewal in Victoria, through the Principles of Learning and Teaching (PoLT). These case studies illustrate how critical reflection and development of beliefs, knowledge and skills can be acquired to better meet the needs of schools.

Introduction

Despite an ongoing agenda of educational reform for teacher education at universities and schools, Fullan stated that, "the way that teachers are trained, the way that schools are organised, the way that the educational hierarchy operates, and the way that education is treated by political decision makers results in a system that is more likely to retain the *status quo* than to change" (1993, p. 3, italics in the original). Australian education systems in particular have relied on politically shaped short-term programs and projects and Moss suggests that this approach has been unable to question or change the dominant patterns of schooling (2006). This pattern of schooling also reflects ongoing education resourcing models based on categories of difference and creates further barriers to progress that continue to reinforce a technical approach to the professional practices of teaching as described by Giroux in 1981. These practices "legitimate and institutionalise dominant beliefs and values; a process that both undermines critical thinking as a democratic educational and social practice" (Armstrong, 2006, p. 8). If we want to progress education reform and change, then the importance of value positions that are grounded by social and cultural beliefs about education, learning and difference need to be acknowledged. Critical social theory (Leonardo, 2004) informs an approach to education that can facilitate teacher reflection and imagination to consider an alternative reality and hope for education and society (Giroux, 1983; Giroux, 1988; Greene, 1986; Kincheloe, 1993). Leonardo (2004) highlights that critical social theory draws on the work of Freire and Giroux by promoting "ideology critique, and analysis of culture, attention to discourse, and a recasting of the teacher as an intellectual or cultural worker" (p. 12).

In Australia, pedagogy is viewed as a practice or a craft representing the teachers' accumulated wisdom with respect to their teaching practice acquired over time. Teachers' knowledge and beliefs provide a framework for pedagogy, knowledge of students, subject matter and the curriculum, and guides the teachers' actions in practice. Australian teachers are encouraged to engage in critical reflective practice and 'personalise' and 'individualise' their teaching practices so that pedagogy flows from the understandings and knowledge in the minds of teachers.

The ongoing challenge for teacher education and professional development for teachers is how to explore new ways of teaching and working with students that suit both the local context and the community, and that contribute to quality learning and high standards. Educators are realising that teachers (pre-service, beginning or experienced) do hold implicit theories about students, the subjects they teach and their teaching responsibilities, and that these implicit theories influence teachers' reactions to teacher education and to their teaching practice. The extent to which experienced teachers' conceptions and beliefs are consistent with their practice depends, to a degree, on the teachers' opportunities to critically reflect on their actions and consider new possibilities for teaching. Through this critical reflective process, teachers may be able to develop coherent rationales for their beliefs and classroom practice and may even become more aware of viable alternatives rather than proceeding on impulse and intuition. The continuum of teacher professional learning experiences begins in teacher education. Throughout their professional lives, teachers will continue to engage in ongoing professional development and learning.

In this paper we describe three Australian projects that support the cultivation of teachers' critical reflection of beliefs, knowledge and skills for leading change in schools. The work in these projects illustrates communities of practice that promote active and critical dialogue, and questioning of historical and traditional assumptions about education. Pre-service and in-service teachers in each project socially negotiate their own identity as teachers as well as develop their own individual agency through self-reflection. Individuals through each community of practice reflect, construct and adopt identity positions for themselves (Bucholtz & Hall, 2005) that represent the experiences of initial teacher education, a university professional learning initiative and the outcomes of teachers' participation in a large, government, system-wide pedagogical program. The discussion presents a continuum of teacher critical reflection and learning which actively questions the historical and traditional assumptions about how education understands professional knowledge. Reflection, particularly self-reflection, can be linked with critical social theory and thus to transformational learning (Gur-Ze'ev, Masschelein & Blake, 2001; Thompson, 1990). The discussion of the three projects highlights the continuum of teacher learning that enables a discerning and critical position that allows teachers to actively question assumptions about how professional beliefs and knowledge are understood and enacted.

Project One

A Service-learning Program is a pathway of learning within a core unit for Bachelor of Education students at a large university in Australia. The Service-learning Program aims to broaden students' experience and understanding about the backgrounds and values of people in society. One of the specific aims of the unit of study is to develop and work within legal and ethical frameworks that promote diversity, equity and inclusive education (Carrington & Saggars, 2008; Saggars & Carrington, 2008).

Service-learning can be conceptualised within a social-cultural framework, and can be described as "people learning as part of developing a practice" (Comas, Bunn, Hiller & Miller, 2005 as cited in Butin, 2005, p.110). The social and cultural aspect focuses on the importance of such learning to the development of the individual and their own identity, that is, who you become or do not become as a person or a citizen, and how you, in turn, interact with the world and your community (Comas et al., 2005 in Butin, 2005). The Service-learning Program is based on reciprocal relationships with organisations in which the service reinforces and strengthens the

learning in the academic units on inclusive education, and the learning reinforces and strengthens the service in the organisations. This service activity is voluntary work. Rationales for promoting service-learning as part of teacher education support the opportunity for critical reflection for challenging assumptions, for applying knowledge to problem solving, and for increasing pre-service teachers' sensitivities to their students' home communities.

Facilitated reflection within service-learning is important because it allows participants to see the link between their individual acts of service in the community, their view of the world and their university study. Active and reflective engagement about experiences in service organisations combined with encouragement in the university unit to imagine how schools could be different may help pre-service teachers to consider alternative and more inclusive approaches to their teaching practice. Students' understandings of ethics, diversity, equity and their roles as teachers and citizens are transformed by their experience of service in the organisations, reflecting on their experiences and academic learning, and in preparing their culminating assessment item - the Service-learning reflection log. The reflection log is a particularly powerful vehicle because it leads students to reflect deeply on their transition from being largely unaware of societal inequities to being deeply aware of such forces and the critical importance of their role as teachers in a democratic society.

Reflection, as a research practice in teacher education programs, is a common methodology (Fendler, 2003) in educational research. The process could be described as an examination of personal experience and thought but, when combined with learning in a university unit, it could promote social reconstruction of knowledge and views to inform teaching. Data from the student reflection logs were imported as text files into NVivo 7 (http://www.qsrinternational.com/products_nvivo.aspx). This software package is a tool to assist with qualitative data management and analysis. It has purpose built tools for classifying, sorting and arranging information and assists the researcher to analyse data and discover patterns, identify themes, and develop meaningful conclusions. Qualitative data analysis techniques were employed such as organising and coding student reflection log data. Marshall and Rossman (1999, p. 154) state that, "identifying salient themes, recurring ideas, language and patterns of belief that link people and settings together" allow categories and sub-categories to be formed into which segments of text can be placed. The research team generated categories from the data; constantly checking the emergent understandings and clarifying these with the research team.

Data were analysed according to Butin's (2003) theoretical framework: Technical; Cultural; Political; and Postmodern/Post structural lenses. Such perspectives are not necessarily clearly delineated, but overlap and blend together to some extent; the lenses do, however, help us to bring greater clarity to the service-learning experience (Butin, 2003). Further to this analysis, data were also categorised under the theme: Role of a Beginning Teacher. Viewing service-learning from multiple perspectives is useful and can assist us to "move forward in developing, extending and reconstituting diverse means and goals for service-learning" (Butin, 2003, p. 1689).

Reporting the Data

A sample of data from each category is reported in the following section (for a more comprehensive report of data see Carrington & Saggars, 2008; Saggars & Carrington, 2008). A technical conceptualisation of real-world learning focuses on its pedagogical effectiveness. In the Service-learning Program, all students commented on the pedagogical effectiveness of the experience and described how the learning in the community organisation reinforced the learning about the theory of inclusive education at university: "Being able to relate the theories and ideas that were put forward to practical applications made them come alive for me." (Student 25)

A cultural perspective reflects how the experience fosters a respect for diversity, to gain a greater awareness of societal concerns, to develop a stronger moral and ethical sense, and to encourage volunteerism and civic engagement (Butin, 2003). The students completed service in an array of community organisations that catered for the needs of a

diverse population of children and adults. The service-learning experience was an opportunity for many university students to interact with people from different cultures and backgrounds. The following reflection from a student indicates growing understanding and awareness of different people's needs: "From my experience I have come to more fully realise how distinctive all people are and that it is important to understand what their life goals and desires are." (Student 5)

The students were able to witness examples of discrimination and marginalisation that influence the choices people have in society. These power relations included the difficulties experienced by some people and the harsh reality of hierarchy and effects of the power of the dominant voice. The following comment illustrates student learning in this area: "(North Lifestyle Support Services) helps reduce ostracism within society by allowing people with disabilities to effectively interact within their local community." (Student 5)

This perspective would focus on how the learning experience "creates, sustains, and/or disrupts the boundaries and norms by which we make sense of ourselves and the world" (Butin, 2005, p. 91). The students in the service-learning program demonstrated deep thinking and learning in the data gathered in the reflection logs. The log was scaffolded to encourage the students to link their experience in the community to their learning about inclusive education at university. The questions were designed to challenge their assumptions and beliefs and to consider their future roles as teachers. Critique was expected in this section so that students could question, deconstruct and reconstruct knowledge. The following observation illustrates how the learning experience challenged their ingrained traditional beliefs and understandings about people in society and in particular prompted a reconsideration of their own identity and opportunity.

"I was surprised that this woman had not learned her birthday before. She told me that her husband knew that sort of thing so it had not been important for her to know. The rigid gender roles in her family's culture are so different from my own. I imagine this has a huge impact on her self expectations. I hope that she will see for herself greater opportunities in Australia for more independent participation in society. However, I recognise that this is my own value formed by my life experiences in this culture so I do not pass judgement about her dependence on her husband." (Student 7)

The following comment illustrates the impact of the service-learning experience on the students' ideas about their teaching philosophy and role as a beginning teacher.

"I believe that teachers need to be community minded and aware of the needs of different people. When I become a teacher, I want to have an inclusive classroom and support inclusive principles. I want to instill in my students the importance of recognising and valuing all members of society especially those who fail to get recognised such as the elderly and people with disabilities." (Student 4)

Summary

The data highlight how the students reflect and critique their world, and imagine how they could contribute to a better world in their work as a beginning teacher (identity). Further to this knowledge transformation, the students demonstrated an enhanced understanding about inclusive education and they were able to reconstruct their own vision of what their future role and agency as a teacher could be. This vision enabled them to consider their roles as activists and change agents in the teaching profession. The reflection process, informed by the work of Butin (2003) and Bain, Ballantyne, Mills and Lester (2002) facilitated the participants to see the links between their acts of service, the connection to their university study, and their view of the world (Bringle, 2003).

Project Two

In the second project we explore how collaborative inquiry (CI) was important for teachers in reflecting on and understanding their practice and the literacy learning of the students in their schools which led to development and change in pedagogy. We draw on work in a university–school partnership, the Learning Improves in Networking Communities (LINC) project, from 2001–2005.

The National Goals for Schooling in the Twenty-First Century and *Educational Goals for Young Australians* are policy levers that explicitly aim to ensure that the learning progress of students who may be educationally disadvantaged is equivalent to other students over time and is free from the effects of negative forms of discrimination (MCEETYA, 1999; 2008). The message repeatedly made in the research literature is that improving teachers' pedagogy is the most effective way to improve equity of student outcomes (Field, Kuzcera & Pont, 2007) and to improve student achievement (Gustafsson, 2003; Hanushek, 2004; Hill & Rowe, 1996; OECD, 2005). Engaging teachers in professional learning communities is increasingly viewed as a promising form of professional development and as a structure for transforming pedagogy. Some of the perceived benefits of professional learning communities relate to the connection with teachers' beliefs and knowledge and their context (Lieberman & Pointer Mace, 2008; OECD, 2005). The current consensus is that developing a responsive pedagogy for *all* needs to build on the collective knowledge and practices of teachers in schools so that 'new' knowledge can be reframed and connected with the particular context (Parr, Nuttall & Doecke, 2007; Timperley & Alton–Lee, 2008).

In light of these issues, and the challenge to redress some of the educational inequities in Catholic schools in Victoria, LINC was designed with the aim of supporting teachers in professional learning communities and to be responsive to differences in school contexts. Consistent with similar practices in other places, LINC emphasised professional *collaboration* and research *inquiry*, placing an overt focus on:

1. Building collective research capacities and strengthening the links between research and practice (Katz, Sutherland & Earl, 2005; Timperley & Alton-Lee, 2008);
2. Connecting assessment with student learning to give meaning to student achievement and the imperatives for accountable school reform (James, Black, McCormick, Pedder & William, 2006);
3. Critical reflection and sharing of evidence and practice in a PL community (DuFour, DuFour & Eaker, 2008; Stoll, Bolam, McMahon, Thomas, Wallace, Greenwood et al., 2006); and
4. Connecting local understandings with positive change (Ainscow, Booth & Dyson, 2006; Mulford, 2008).

Substantive financial and in-kind resources supported the university educators to collaborate with teachers and leaders in school-based professional learning teams and within a network of secondary schools.¹ Schools volunteered for the project and teachers within each school volunteered for school-based teams. In each school specific foci relevant for development in the context were jointly developed with an agreed set of goals, shared responsibility and accountability for the work. School foci were addressed through teachers' collaborative research. Teachers' individual action research reports were submitted twice a year and were assessed for university credit over two academic years. They culminated in a postgraduate qualification in education. Teachers shared their research with colleagues at the annual LINC conference and summaries were published on school and LINC websites. A range of quantitative and qualitative methods were employed to document and analyse measures of teachers' pedagogical practice, and professional beliefs and knowledge and

¹ The Learning in Networking Communities (LINC) is a research and professional development project at Monash University that has been supported with funding from the Catholic Education Office, Melbourne (CEOM), the Catholic Education Office, Victoria (CECV) and the Australian Research Council (ARC). LINC Project 1 was conducted in eight primary and secondary schools in rural, regional and metropolitan catholic schools in Victoria, Australia. LINC Project 2 was conducted in six Catholic secondary schools in metropolitan Melbourne, Australia. LINC Project 3 (2008–2011) has a specific focus on improving literacy in Catholic secondary schools.

student learning over time. Each of the projects used more than one measure of teacher impact as well as data on impact on student achievement so that links could be made between improvements in student learning and changes in teachers' beliefs, knowledge and practices. Taken together, the findings from our research provide strong evidence of the effectiveness of using collaborative inquiry. Collaborative Inquiry has supported teachers to reflect on, understand, articulate and develop pedagogy in different school contexts that has in turn demonstrated significant positive changes in teacher beliefs, knowledge, practice, efficacy and student literacy outcomes (Deppeler & Harvey, 2004; Deppeler, 2006; 2007; Dick, 2005; Meiers & Ingvarson, 2005). The evidence discussed here is drawn from teachers' self-reported data in their reflective journals, research reports, presentations, emails between teachers and researchers, and audio recordings of teacher interviews and meetings. Attention is given to three activities that were important for enabling teachers to articulate and better understand their practices and supported shared pedagogical decisions. Representative talk is used to illustrate themes and to bring teachers' voices to the discussion of Collaborative Inquiry.

Reporting the Data

The research team expected that the Collaborative Inquiry process would necessarily engage the teachers in each LINC team in ongoing discussion. For example, in the first cycle, the team engaged in an examination of the school context including an audit of policies, beliefs, practices and student achievement (Deppeler, 2006; 2007). While the audit provided the framework, there were variations in the way in which individual teachers and their teams engaged with the process. Every teacher had a unique starting position based on their beliefs about teaching and learning, previous experiences, and professional knowledge and identity that was shaped by the culture and practices and their position in their school context. The process engaged teachers in conversations about what data show, what questions required further investigation, and required agreement on the priority focus for development. Teachers in each team had to collectively decide and plan their subsequent investigations and collection of data in order to understand and improve student learning in the area of priority. The emphasis is on critical reflection and depends on the extent to which discussion was democratically distributed among the members or controlled by one or two teachers. There was tension during some of the early audit meetings, when individual teachers dominated discussion with their experiences and perspectives. Challenges to collaborative discussion included: conflicting professional approaches; competing positions of authority, communication skills and differing levels of professional knowledge. These issues influenced what evidence was discussed, who asked critical questions, how questions were framed and what became admissible as alternative possibilities for investigations and for development priorities. In response, we introduced several protocols intended to prompt more democratic and authentic participation as opposed to mere involvement. Each protocol provided a format and explicit structure to enhance communication, promote articulation and open examination of beliefs and professional understandings and was linked to specific evidence that teachers had collected. The elements in common included: understanding the evidence from multiple perspectives; questioning taken-for-granted assumptions, routines, rationalisations; and/or unexamined explanations (Loughran, 2002).

Protocol 1: Using Summative Evidence to Explore Context and Formative Understandings

Quantitative data arising from standardised student achievement testing was summarised in tabular and graphic formats for each school. This data set allowed teams to identify students with performances below benchmarks in literacy, to compare their school's overall performance with 'like' schools and to get beneath the summary data to examine items and understandings. The university educator modelled, with each team, a protocol for interpreting, articulating, questioning and summarising aspects of the data. The protocol included: the assignment of specific roles;

questions to guide analysis in interpreting scales and graphs; and an explicit process for giving feedback to the team and for clarifying issues. This structured process facilitated the less numerate members of the team to participate actively and emphasised the importance of communication skills for collective decision-making.

“... the unspoken question was is this just going to be another waste of time meeting where few speak and many listen... to my surprise I suddenly realized it was well past seven and we were still all talking about our data.” (Teacher 12)

The process reinforced our emphasis on the goal of fostering *learning how to learn* among teachers as well building capacity for using summative evidence to generate questions about student learning and what was important for further investigation in their context. Importantly, the structure allowed teachers, who were less confident in themselves, to reflect and contribute their knowledge and to suggest possible agendas for the next stage of inquiry.

“I’ve never really been interested in math and I don’t have anything to do with the staff who teach it but I found this (the session) interesting... to listen to others discuss our results and to do my part thinking about what it meant made me realise I could contribute.” (Teacher 17)

Protocol 2: Researching, Reflecting and Sharing Shapes Practice

In a later stage of the project, teachers were engaged in examining and testing propositions that had arisen from their audit. Investigations commonly included practices based on Black and Wiliam’s work (1998) that emphasised the learner’s contribution as a source of data (questioning, feedback, shared criteria, and peer and self-assessment). As a part of this process teachers used a range of pedagogical observational tools in conjunction with a tuning protocol to systematically analyse school-wide pedagogy. Using video or direct observation and a tuning protocol enabled teachers to give each other ‘warm’ and ‘cool’ feedback about the effectiveness of pedagogy for promoting student learning for the least engaged students. Self-reported evidence from teachers demonstrated that observing and giving feedback can act as a powerful vehicle for adjusting and innovating professional practice, and can build trust and collective purpose.

“Observing a colleague objectively is surely a positive step towards professionalism and creates circumstances to deal with pedagogical issues. We developed an understanding among the team that the purpose was to understand our teaching and our learners' learning. Trusting each other is very important and the tuning protocol helped start this practice. . . but there needs to be enough time to unpack the session to discuss feedback on an equal basis but it’s the only way to understand real teaching and improve it. The more often we observe each other the more comfortable everybody feels and then the process is more productive.” (Teacher 2)

By focusing on student learning, teachers were able to look differently into the pedagogy in their classrooms. As a consequence, the goal to better align teaching intentions with expected learning outcomes became the driver for pedagogical development and improvement. Teachers talked about the connection between research and their practice. The strong theoretical base for many of the pedagogical approaches they investigated, affirmed that the quality of pedagogy was enhanced when informed by the research. At the same time teachers’ investigations were reframed to be responsive to the context in which they occurred and strengthens the connection between research and practice: “I really try to think about what’s behind my teaching now – to understand the theory. It’s not just about the teaching...but it’s understanding how students learn...and what they think about my teaching.” (Teacher 5)

Protocol 3: Articulating Knowledge of Practice Makes the Tacit Explicit

In a similar fashion, and in conjunction with a literacy professional, teachers used a set of explicit criteria to collaboratively examine four samples of students' argumentative writing. Teachers first marked the samples independently, and then discussed and reached agreement on the marks to be allocated for each skill on the various criteria (e.g., text structure, vocabulary, cohesion, grammatical features). The process revealed previously unexamined differences in what was valued by different teachers and enabled teachers from different disciplines to develop common understandings and to align their assessment practices more closely.

"I realise how inconsistent we can be in assessing. When you get to look at this list of criteria and you start looking deeper into it, it exposes different flaws you wouldn't necessarily see. Whereas when you're reading quite a few essays the overall fluency factors in more highly than if you were going to get really stuck into looking at criteria. When I first marked I didn't see there was any understanding just the bad spelling and grammar, even though we only give 10% to spelling. This must happen a lot and they [the students] end up with the wrong message." (Teacher 3)

Teachers were able to reframe assessment practices through shared analyses of evidence and to question how they provided feedback to students so it connected assessment with student learning.

Summary

Establishing and effectively supporting teachers to engage in Communities of Practice in a professional learning community has been the focus of the LINC projects. Our experiences have confirmed that supporting teachers to critically reflect and learn from each other builds professional knowledge and identity and nurtures pedagogical development and improvement. The challenge is to find creative and systematic ways to support teachers to have evidence-informed professional conversations that respond to the challenges in their context. A commitment to examining and improving pedagogical practice and moving beyond individual classrooms is at the core of engaging in collaborative inquiry. One important finding from our work is that teachers need long-term opportunities to build trust and collaborative skills to critically reflect and innovate their practice in response to the needs of their students. The process appears to be enhanced by conditions that provide time and space for collaboration, access to resources, and that emphasise and value teacher professional learning as the way to develop new knowledge and respond to the ever changing and complex issues of schooling.

Project Three

The final project we report on is an initiative to operationalise pedagogical change and curriculum renewal in Victoria through the Principles of Learning and Teaching (PoLT). We draw on a partnership with the University of Melbourne and the Department of Education, Victoria. The Principles of Learning and Teaching P-12 initiative is a component of the Blueprint for Government Schools, *Flagship Strategy 1: Student Learning*, and provides a structure to help teachers focus their professional learning. The principles build on previous research and professional development activity developed by Deakin University, Victoria and the Department of Education and Training, Victoria over past years.

In an attempt to 'capture the essence of effective learning and teaching', the principles are broad ranging, essentially providing a basis for teachers to review their practices to improve their teaching. The PoLT do not advocate a single 'right' or 'best' way to teach nor do they attempt to mandate a single 'one size fits all' approach. Rather there is an increasing recognition of the

importance of collaborative critical reflection between teachers of their pedagogy and of creating classrooms that can be characterized as learning communities.

Goals

The six Principles of Learning and Teaching (PoLT) are:

1. The learning environment is supportive and productive;
2. The learning environment promotes independence, interdependence and self motivation;
3. Students' needs, backgrounds, perspectives and interests are reflected in the learning program;
4. Students are challenged and supported to develop deep levels of thinking and application;
5. Assessment practices are an integral part of teaching and learning;
6. Learning connects strongly with communities and practice beyond the classroom (Department of Education and Training, Victoria, 2005).

According to the authors of the 2006 PoLT manual, the principles of learning and teaching are intended to develop a shared language of pedagogy based around the six Principles; develop insights into the classroom strategies and activities appropriate to each Principle; discuss instances of the particular Principle in their current practice; and develop a process or plan to extend the Principle in their school, as a potential initiative or set of initiatives (Department of Education and Training, Victoria, 2005)

A total of 201 schools in Victoria participated in the 2005 and 2006 implementation of the PoLT. The University of Melbourne was one of the three contracted providers to deliver the system initiative in Victoria during 2005-2006. Education staff from the University acted as leaders, workshop presenters, consultants to schools, and links to the contractual body. The data sources in this case draw on visual methods and image based research. Visual researchers use a range of social science protocols and formats. Visual methods, when used in educational research, are often categorised under participatory methods or are used as the overarching structure and orientation of the study. Critical visual methods have created the space to examine a range of epistemologies that potentially can link beliefs, knowledge and action of the teacher participants. Teacher-generated texts produced during 2006 PoLT workshops were chosen to illustrate how teachers view the process of leading change in this project.

Reporting on the Data

School 1	* INNOVATION + Excellence * ^{Drug Ed.} International Students * ASISTM * PoLT * Mullewa Sports Day * Transition Program * Self Review
School 2	* I + E * Sustainability Grant * VELS Reporting * VELS Reporting * VELS Reporting * PoLT * 7 Learning Team * Mentoring + Induction * New Buildings Program
School 3	* Performance and Development Acc * Youth Focus Grant * Mentoring + Induction * Water Grant * ASISTM * Individualised Learning Program * Centeen Grant * I + E * Performance + Development accreditation * Thinkers Task Force
School 4	* ASISTM * Mentoring + Induction * Buddies/Mentoring * Commonwealth Building Grant * Performance + Development Acc. * Primary Connections (Science) * I + E * Harmony Fest * Stephanie Alexander K.G. School * Healthy Communities PoLT
School 5	* ASISTM * PoLT * Healthy Way to go * Computer Lab * I + E * Name change
ASISTM = Australian School Innovation in Science, Technology and Mathematics	* Performance and Development Accreditation * New 3/4 Yr old Kinder on site

Figure 1: Leading Change. Cluster - Metropolitan Region Victoria

Figure 2: Leading Change. Cluster - Rural Region Victoria

The imagery in Figure 1 and 2 from the teacher workshop reveal how local priorities are reflected as long lists of activities and programmatic approaches to curriculum work are documented. In these examples, it seems that professional learning for teachers is too often reliant on the next available 'bucket' of funds or roll out, as has been the case in the recent commitment of Queensland, New South Wales and Victoria to pedagogical renewal. School leaders, middle managers, and those who work in professional learning recognise the ongoing struggles associated with engaging teachers in professional learning to achieve observable changes to student engagement and improved learning. The roll out type models of professional development do not adequately address the challenge of engaging teachers in critical reflection that leads to transformations in beliefs and practice. Recent research in the United Kingdom (Day & Kington, 2008) suggests that teacher identity formation is a highly significant element of professional work. Day and Kington (2008) list three dimensions to teacher identity, with each composite identity being made up of sub- or competing identities that are significant in understanding the dimensions of professional learning and the influence of the cultural milieu where their work is situated. In light of the barriers that were experienced by teachers who were participating in the large scale pedagogical renewal conducted in Victoria, Day's and Kington's typology is useful in understanding how teachers are positioned during significant reform and to advancing the arguments in this paper. In brief the dimensions of teacher identity are:

- (1) Professional identity. The professional dimension reflects social and policy expectations of what a good teacher is and the educational ideals of the teacher. It is open to the influence of long-term policy and social trends as to what constitutes a good teacher, classroom practitioner, etc. It could have a number of competing and conflicting elements such as local or national policy, continued professional development (CPD), workload, roles and responsibilities, etc.
- (2) Situated or socially located identity within a specified school, department or classroom. The situated dimension is located in a specific school and context and is affected by local conditions (i.e. pupil behaviour, level of disadvantage), leadership, support and feedback. It

is affected by pupils, support and feedback loops from teachers' immediate working context, and is connected to long-term identity.

(3) Personal identity. The personal dimension is located in life outside school and is linked to family and social roles. This dimension of identity could involve various competing elements such as being a father, son, partner, etc. Feedback comes from family and friends, and they often become sources of tension as the individual's sense of identity can become out of step (Day & Kington, 2008, p.11).

Summary

In attempting to scale-up curriculum and pedagogical change, education systems in Australia have invested heavily in the development of comprehensive and well intentioned frameworks and methodologies. The potential exists in an initiative such as PoLT to move beyond a single reading of pedagogy and relies on the development of beliefs, knowledge and skills that can transform understandings of pedagogy. We would suggest that this is a struggle that we need to endure as our working knowledge of this key aspect of teachers work remains marginal to discourses of standards and standardization in research and policy agendas.

Conclusion

These three projects demonstrate the complex ways in which pre-service and in-service teachers critically reflect on and interpret their own beliefs, develop knowledge and classroom skills situated within a specific context. As a result of the work in each of the projects, the authors believe that participants will be able to identify practices in education that reinforce the status quo and challenge them so that the best interests of all students can be promoted. It is this critical frame that we consider significant in the development of both pre-service and in-service teachers. The projects illustrate how facilitated and scaffolded social dialogue combined with self-reflection can assist teachers to develop their professional, situated and individual identity as discussed by Day and Kington (2008). As identities are verbalised and understood, teachers may have a better chance of asserting and resisting identity positions that define them. Critical social and individual engagement can provoke deep reflection about taken-for-granted assumptions about particular groups of pupils or people in our society and the nature of schooling. Through scaffolded professional learning and reflection, teachers will gain a better awareness of their beliefs and knowledge and how they relate to practice.

The three projects demonstrate that through a process of critical reflection, inquiry and development, teachers can verbalise a framework for their beliefs and classroom practice and may become more aware of viable alternatives rather than proceeding on impulse and intuition based on outdated ideals and practice. However, Smyth warns that the education system may focus on "a preferred model of reflection that is inextricably connected to state and national guidelines on what constitutes acceptable qualities and standards of good teaching, with teachers being subjected to increased forms of surveillance and appraisal" (1992, p. 286). Teacher education and professional development programs need to have a strong focus on enabling teachers to challenge the *status quo* and critique their teaching world and imagine how they could contribute to a better education system that supports children and families in our society.

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