Rounding out professional development: Professional Learning Community, Instructional Rounds and Quality Teaching

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In 2007, we were asked to work with a NSW school system to develop a feasible approach to professional development that would enable schools to build teacher capacity, improve student achievement, and be sustainable after an initial significant investment. System leaders of the partner organization, and in particular those responsible for professional learning recognized the value of the Quality Teaching model (NSWDET, 2003) for providing comprehensive conceptual and practical guidance for its ongoing strategic plan to support teaching and learning. We were acutely aware that attempts to implement Quality Teaching had previously been mixed and, in recommending a professional learning approach wanted to maximize the chances of effective implementation of this pedagogical reform.

This paper provides the specific conceptual basis for the professional learning approach used in the longitudinal study we entered into with the school system, which we called the Effective Implementation of Pedagogical Reform (EIPR) study. The approach was deliberately designed to circumvent difficulties that have long been associated with forms of teacher professional development that:

- Conceive of professional development as the explanation of policy and curriculum:
- Use an inadequate top down methodology that focuses largely on transmission of knowledge, such as some "train the trainer" models;
- Are too limited or narrow in subject content; or
- Fail to contribute to the production of a coherent system-wide professional learning agenda.

We also approached this study, well aware of significant difficulties in researching the impact of professional development, such as:

- measuring the effects of PD on teaching practice;
- tracking the impact of changed practice on student achievement;
- isolating features of successful PD that are feasible and affordable for large scale implementation;
- accounting for the mediating effects of social and cultural contexts; and
- producing sustainable changes.

In responding to this opportunity to work with one school system on effective pedagogical reform, we were aware that we needed to design both a defensible and feasible approach to professional learning and a research methodology that would enable claims to be made about the efficacy or otherwise of the approach. The initial findings from the Systemic Implications of Pedagogy and Achievement (SIPA) project carried out by Ladwig, Gore and associates from 2004-2007 reinforced the importance of attention to the implementation of reform if systematic improvements in teaching practice or gains in student achievement were to be produced. The SIPA research made some progress in identifying features for

successful improvement of pedagogy that lift students' academic achievement, which were consistent with the growing consensus on principles of effective PD: adequate time for professional learning, collaboration among teachers, reflection on practice, coherency of the professional learning program, and participation in active rather than passive learning (Newmann et al, 1996; Desimone et al, 2009; Slavit et al, 2009).

The approach we developed, which we refer to as "Quality Teaching Rounds", brings together three key approaches to professional learning that have the potential to meet the criteria for effective professional development. The three approaches that constitute the Quality Teaching Rounds are: (1) professional learning community, (2) instructional rounds and (3) Quality Teaching. While these three professional learning approaches have different strengths and weaknesses, we were mindful that together the three have potential to address the widely accepted need for simultaneous and sustained attention to individual inquiry and collegial inquiry within a coherent program (King & Newmann, 2000) if professional learning is to be effective.

Our purpose in the remainder of the paper is to elaborate why we have chosen each of the three approaches and to argue how bringing the three together offers a powerful new approach to teacher professional learning. We proceed by addressing each approach in turn, discuss how it addresses the principles of effective PD while also attending to weaknesses that have been discussed in PD, teacher learning and school effects research literature.

Professional Learning Community

During the last ten years PLCs have been widely heralded as meeting teachers' needs for collaboration (Seashore-Louis, 1996, 2003; McLaughlin & Talbert, 2003; Bolam et al, 2005). While they are discussed in North American, British and Australian literature under various and diverse combinations of features, at their most productive, PLCs have the potential to enable a local focus, and build the respect, trust and confidentiality that are conducive to breaking down 'privatism' in teaching (Warren-Little, 1982). PLCs have the potential to support participants to engage in rigorous and challenging work. Moreover, they have the potential to attend to some of the serious constraints of conventional PD by creating the social conditions that can support resistant or change-fatigued individuals in time-poor environments and nurture a diversity of teacher dispositions and beliefs for productive professional learning. In studies that have examined PLCs where good student results are occurring (correlation studies), PLCs tend to be characterized by:

- Shared values and vision
- Collective responsibility for student learning
- Reflection on practice
- Collaboration
- Individual inquiry

However, these qualities are certainly not a given in any PLC. Trust, respect, support and inclusion, while characteristic of effective PLCs, according to North American and British literature (Bolam et al, 2005), and reported as features that determine the effectiveness or maturity of a PLC (Seashore-Louis, 2003; Bolam et al, 2005) and what it can inevitably produce, are not easy to enact. Significant problems in reaching maturity or effectiveness have been reported (e.g., Grossman et al, 1998). Moving groups of teachers toward mature PLC functioning remains an unresolved challenge in the professional development field and was a consideration in our development of the Quality Teaching Rounds approach.

The broader limitations of PLCs are well documented (Seashore-Louis, 2003; McLaughlin & Talbert, 2003; Elmore, 2007); none more so than the sheer diversity of definition for what a

PLC actually is and does. Primarily, commentators have acknowledged the following constraining elements on the effectiveness of PLCs: 1) a lack of agreed and explicit knowledge base; 2) repressive power relations and distrust within a PLC; 3) the large investment of time required to develop common language and purpose; 4) cultural norms of privacy; and 5) collegial niceties that detract from critical analysis of practice. While awareness of these limitations does not detract from the potential of PLCs for teacher professional learning, it does require careful attention to how they are constituted and how they function.

Some jurisdictions and consultants are tending to uncritically advocate PLCs as the solution to teacher professional learning and teaching improvement without qualification. While some studies, such as Newmann's CORS work (Louis & Kruse, 1996; Newmann et al, 1996) have some empirical evidence of the positive impact for PD that has focused on teachers working within some level of community, this research and others since has not been designed to make causal statements about the mediating effects of such features as shared vision or collaboration or collective responsibility. Rather, the research in this area is primarily in the form of co-relational studies, demonstrating statistically significant relationships among features characterizing a community of teachers whose students lifted their prior achievement as a result of participation in a reform initiative such as Authentic Pedagogy (Newmann et al. 1998).

In many of the reported studies, including the British meta-analysis of the effectiveness of PLCs (Bolam et al, 2005), there is yet to be a rigorous experimental design that can claim causality between PLCs (in any particular iteration) and student achievement. In many of the studies, an effective or mature PLC, that leads to positive impact on student achievement are identified precisely by working backwards from a study that has empirical evidence of positive impact on student academic achievement. This synthetic approach, such as that taken by Seashore-Louis (2003), looks to build a profile of the teachers involved in a reform initiative and the conditions under which they carried out the reform. In such studies, the implementation process is not explicitly mandated or limited to a single PD approach. Instead, attempts are made to find what characterizes the group of teachers or the practices of a group of teachers whose students perform well.

The result of this grounded process is that those working within educational jurisdictions to achieve professional development have available a growing consensus as to what makes a productive PLC – namely, the importance of shared values and vision, collective responsibility for student learning, reflection on practice, collaboration, and individual inquiry. However, building PLCs from scratch in order to mediate the social and cultural contexts for professional development using these criteria is no small feat. Putting teachers into groups that are called professional learning communities will not necessarily produce the conditions or relationships that will enable a PLC to prosper. However, in our view, the potential of PLCs can be enhanced if other aspects of professional learning are attended to. In this context, we turn now to a discussion of Instructional Rounds.

Instructional Rounds

A second professional development approach that was beginning to show promise in building capacity in schools is Elmore's (2007) adaptation of the medical rounds approach, which is now referred to as Instructional Rounds (2009). Prior to 2007, educational researchers such as Hargreaves (1994) had been cautious about comparing medical systems with educational needs. Elmore's (2007) instructional rounds approach, as described through his work with the Connecticut Superintendents' Network, is focused on developing coherency within a school system using instructional leaders such as superintendents, to conduct observations of representative lessons in an attempt to build an evidence-informed pedagogical profile of a school. The purpose of this analytical audit is to

focus system resources and target reform to local needs in a system-wide coherent manner by using local evidence of instructional needs.

What was particularly encouraging about this early conceptualization of Elmore's Instructional Rounds approach was its dual focus on the need for a common language and on scaffolding an inquiry. Elmore's model acknowledged the need to base inquiry on local evidence and diagnosis of local conditions by building a descriptive language that allowed participants to describe and analyze what they were observing. Elmore's adaptation of the medical rounds was addressing the need for a common objective language for describing practice so that participants could reach agreement when attempting to prioritize the needs of the school and establish the requirements for the next level of work. This scaffolding was achieved with protocols based on the work of McDonald (1998). The focus on common language, however, was more about the process of objective observation rather than the construction of an agreed professional knowledge base. Only a few articles were available on the Connecticut Superintendents' Network in 2007 and what was more salient in the explanation of the teachers' professional conversations was the process; the substance of a professional pedagogical knowledge base was assumed.

Generally, researchers in the area of teacher learning, but particularly in the subject areas of science and mathematics instruction (Slavit et al, 2009), have insisted that less rather than more prescription is required to engage teachers in professional inquiry (Stewart and Brendefur, 2005). This reluctance to prescribe has meant that in previous PD, where the goal has been to inquire into practice, participants have had a great deal of control over the direction of the inquiry. This autonomy afforded to teachers has largely been due to findings that teacher engagement is dependent on respecting their professional judgment (Ingvarson et al, 2005). While we also acknowledge that teachers' are in the best position to find solutions to local problems and refine the pedagogy of the profession as a whole, such a conceptualization of teacher professional learning poses serious limitations, especially given research which has demonstrated that teachers are often unable to articulate their best practice in professional conversations (Louis & Kruse, 1996; Grossman et al, 1998; Elmore, 2007).

Seashore-Louis (2003) and Gore (2004) have argued that often teachers' practice remains tacit and lacking in specificity. Recent studies exploring teachers' professional conversations (Warren-Little & Currie, 2003; Elmore, 2007; Timperly & Earl, 2009) have found that teachers can make general statements but even when faced with local student work samples, they are less likely to use specificity or reach agreement, let alone move to the later stages of an inquiry cycle, despite the use of protocols to guide their analysis. While protocols scaffold cognition they do not provide substance, such as agreed terminology and standards to differentiate observations. Therefore, even recent studies, doing fine-grained analysis of teachers' professional conversations, demonstrate participants in the early stage of a collaborative inquiry cycle. Granted some of these studies have focused on limited data samples, however, they demonstrate teachers' in the initial steps of describing and analyzing, with little evidence of moving to evaluation, refinement, experimentation, description, analysis and further refinement, all of which are necessary steps towards a process of ongoing inquiry to improve pedagogy and move to action. Such inquiry cycles are at the foundation of clinical or medical rounds approaches, and are heavily scaffolded and embedded in the culture of practitioners in these professions. While Hargreaves (1994) had argued that the certainty and specificity of the professional knowledge base and language, important foundations to medical practice were unavailable to educators, Elmore (2007) has tempered this viewpoint by pointing out that psychologists, generally speaking, have a similar level of epistemological diversity as educators but have still managed to acculturate their profession with clinical mechanisms for refining practice.

In 2007, when developing an appropriate PD approach for our partner organization, we were fortunate to have a pedagogical framework with a common language and instruments with protocols and standards for developing descriptive and analytical power around the parts of practice. Further work on authentic learning has also drawn attention to the importance of learners being able to articulate new understandings with other learners through dialogue, and many recent positive outcomes in literacy and numeracy have focused on the value of learners expressing their meta-cognition to others (Bransford, 2003). The protocols that were used to scaffold Elmore's Connecticut Superintendents' Network (Elmore, 2007) were not publicly available but we were confident that the Quality Teaching model already possessed this necessary inquiry scaffold along with addressing one of the significant limitations of much PD, the lack of a common knowledge base for reaching agreement and working on refining pedagogical practice.

As stated previously, the system leaders we worked with had recognized the value of embedding the Quality Teaching pedagogical framework for improving pedagogy and student achievement in their schools. King and Newmann (2000) as part of their CORs work on Authentic Pedagogy asserted that an underlying condition needed to support collegial inquiry is the ability to communicate conceptual understandings and differentiate parts of practice. The NSW model of pedagogy, Quality Teaching (NSW DET, 2003) that we discuss in more detail below, is being used throughout this study to provide the common language and conceptual standards to underpin the professional learning intervention. The ability to think within an agreed conceptual framework, the hallmark of most professions, requires a common language and a set of conceptual standards, if only to begin the work immediately of refining both.

Elmore's Instructional Rounds looked promising for addressing the constraining conditions of PLCs, such as the large investment of time required to develop a common language and method of inquiry, and as a means of moving teachers to critical analysis rather than stuck in an exchange of niceties in order to relieve the personal vulnerability of participants. Without access to the specific protocols implemented by Elmore (2007), we were unable to evaluate whether the Network's approach would address the lack of agreed knowledge base and whether the approach would have potential for building capacity in an individual school. However, we thought a Rounds approach would provide the PLC with clear structure and purpose and that, when combined with the Quality Teaching "protocol" it had the potential to develop a teachers' descriptive and analytical capacities to individually and collectively diagnose their teaching practice in order to enact continuous improvement in pedagogy.

Quality Teaching

The third PD approach to be discussed is the Quality Teaching model. Ladwig (2003), Gore (2004, 2007)) and their colleagues have worked with a variety of schools in the Australian context, using the Quality Teaching model, to help teachers understand and incorporate a conceptual framework designed to increase students' authentic academic achievement into their own curriculum, instruction, and assessment practices. The results have been quite convincing (Amosa et al, 2007). Student achievement improves when teachers focus on three dimensions: "Intellectual Quality," "Quality Learning Environment," and "Significance." These dimensions have been derived from Newmann's (1996) Authentic Pedagogy model. Whether a teacher is developing a lesson plan or task, teaching a lesson, designing an assessment, or evaluating student performance, the goal is to incorporate high levels of Intellectual Quality, Quality Learning Environment and Significance. Where this quality of teaching has been accomplished, student achievement improves measurably (Ladwig, 2007). Furthermore, equity gaps narrow, especially gaps between high and low SES students and between Aboriginal and non-Aboriginal students (Amosa et al., 2007). The Quality Teaching model provides teachers with a language and pedagogical performance indicators to help teachers describe and make inferences from local classroom based evidence. These indicators can be framed as inquiry questions, as they are in the recommended manuals (NSW DET, 2003; NSW DET, 2005), where they are presented as focus questions to direct teacher discussions, such as in relation to the indicator of Deep Knowledge, "to what extent does the knowledge addressed in the lesson focus on a small number of key concepts and the relationships between them?" or in relation to Explicit Quality Criteria, "to what extent are students provided with clear criteria for the quality of work they are to produce?." For each dimension of the model, which is an extensive synthesis of what educators and researchers already know are important parts of the pedagogical whole that leads to deep learning and higher student achievement, Ladwig and his colleagues have developed standards by which to reach agreement about teachers' efforts. Therefore each indicator, known as an element, is provided with a Likert scale, offering teachers five descriptors to begin the work of building specificity about their observations and the relationships between those parts of practice. The indicators for Intellectual Quality, for example, are Deep Knowledge, Deep Understanding, Problematic Knowledge, Higher-order Thinking, Metalanguage and Substantive Communication. Accompanying these elements of the Intellectual Quality dimension are descriptors that allow teachers to reach a level of specificity about the presence of the element in the instruction or task and how it operates in relation to the other elements to develop the Intellectual Quality of the learning or, as Newmann's model would reiterate, how it demonstrates the authenticity of the learning for the students. The process of developing a detailed lesson and then discussing it with a group of colleagues has proved to be a powerful tool for making teachers' practice more explicit and therefore open to refinement and transference (Ladwig et al, 2007).

The Quality Teaching materials therefore enable a fine-grained analysis, informed by evidence, by providing descriptors that help teachers differentiate each indicator of quality. The QT model by providing a coding scale from 1-5 for each indicator, offers those with the job of analyzing teaching practices, detailed characterisations of the presence of each indicator. QT, therefore, provides a system that differentiates between, for example, deep and shallow understanding, the participation of all students or only some, explicit and implicit criteria and so on (Gore, 2004).

However, Quality Teaching also has its limitations as an approach to professional learning, in that its rigor in constructing a language that describes the parts of practice requires an authentic and sustained implementation process. Gore and Ladwig (2006) found that teachers misunderstood Quality Teaching as a checklist of teaching practices, that they were sometimes reluctant to engage in the substantial intellectual work that it requires and that many were afraid/resistant to applying it to their own practice for fear of being judged negatively. The potential of QT was unlikely to be realized without a supportive and sustained professional learning approach that enabled teachers to develop a deep understanding of the model and to see how it might be used to improve their own practice. In this context, the concept of Quality Teaching rounds was conceived.

Quality Teaching Rounds

QT Rounds are a synthesis of the positive aspects of each of the three described professional learning approaches, acknowledging that the best opportunities for significant teacher professional learning are likely to require that each of the currently agreed principles of effective PD are attended to: adequate time for sustained engagement, collaboration with colleagues, reflection on practice, a coherent framework to guide improvement, and active learning. Only then, we argue, will we be able to isolate whether some conditions have greater effect than others, are interdependent or identify an as yet unknown condition. Together, PLCs, Instructional Rounds, and Quality Teaching would at least in principle provide such conditions for effective professional development.

In the EIPR study, the specific approach commenced with two introductory days where volunteer teachers formed school-based PLCs and worked with an academic partner to facilitate the process of developing a shared understanding of the professional community aspect of the intervention. Although some volunteers may previously have worked with one or more of the PD approaches that were purposefully fused to construct the QT Rounds model, we wanted the participants of each PLC to understand the program logic of the intervention and have some control over how their PLC might need to be conducted to best support the local conditions of each school. The 28 volunteers representing the four schools of the EIPR study, engaged in discussion and debate about the discourses surrounding Professional Learning Communities, Medical Rounds and Quality Teaching. During these two introductory days the participants were encouraged to engage with individual inquiry through professional readings and they were encouraged to bring disconfirming evidence or anecdotes to small and whole group discussions.

Of the four EIPR schools, three are primary schools and one is a secondary school. Each of the schools has formed one professional learning community, the members of which agreed to use collegial inquiry to improve teaching practice by working within the expressed PLC norms, which were explained to the members and negotiated and ultimately determined by the members as trust, respect, confidentiality and agreed purpose. All four schools reached agreement about the benefits of PLC norms and the purposes of their inquiry as (1) learning about the Quality Teaching model from an academic partner with an authentic understanding of the model; and (2) improving their pedagogy through collaboration with their colleagues in order to build a coherent approach to pedagogical reform within their respective schools. The Academic Partner leading the two introductory days reinforced what the QT model is not: (1) a simple formula to be adopted by unthinking or disenfranchised teachers; and (2) a framework that stipulates a particular approach to teaching, excluding all others (Gore, 2004). We felt this was necessary to address some of the misconceptions that may have existed due to previous engagement with less authentic articulations of the Quality Teaching model.

Importantly, the two introductory days also introduced the participants to the indicators and descriptors of the QT model through the use of materials, such as the classroom practice and assessment manuals, teaching episodes, and modeled scoring samples. Like its analytical predecessors, Authentic Pedagogy and Productive Pedagogy, QT provides teachers with indicators of quality pedagogical practices. Although teachers within the system had had varying levels of exposure to the Quality Teaching model since its initial implementation in NSW public schools, and more directly since 2006 where we had provided an academic partnership with the system engaging in a case by case basis approach with system schools, we felt that it was necessary to use the introductory days to involve all the participants in a moderation process that would build greater clarity and attend to limiting misconceptions.

In each of the four schools, QT Rounds occur during seven whole school days in the first year, and nine days in the two subsequent years. This number of days represents a whole day when each member of the PLC is the focus of the inquiry. The longitudinal nature of the EIPR study enables us to capture three to four observations for each member of the PLC over three years. It also allows schools, over the course of the project, to use two days per year if necessary to integrate system initiatives using the QT lens, therefore extending the idea of the initial introductory days to build a coherent approach to the project.

The QT Rounds are organised around three sessions over a whole school day:

- 1. discussion of readings, reflecting on experiences since the last meeting, and preparing the group for the following two sessions;
- 2. classroom observation of a learning sequence, usually of one hour duration; and

 coding of one teacher, using the Quality Teaching Classroom Practice Guide followed by discussion of the pedagogy observed, the codes obtained, and teachers' insights into strengths and refinements.

Summary

Brought together, we argue that 'Quality Teaching Rounds' have the potential to make effective and substantial teacher professional learning achievable. Quality Teaching Rounds bring a collective focus to diagnosis and refinement of practice with local evidence. Conducting the rounds process within the context of Professional Learning Communities enables the sustained relationships and time needed to build authentic professional learning. Quality Teaching provides the conceptual lens and shared language, plus its own protocol with a degree of specificity and guidance for professional conversations that is not available in other protocols. Moreover, this specificity allows the approach to be conducted without a facilitator which is critical to its capacity building and sustainability.

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