

Master Classes: building on the ‘lesson study’ approach in a Sydney school

Greg Elliott

*St Mary Star of the Sea College, Wollongong,
Australia*

Abstract

Greg Elliott is a Deputy Principal at St Mary Star of the Sea College in Sydney, Australia. The school participates in the Coalition of Knowledge Building Schools that supports enquiry-based professional learning. In this article Greg tells us about a project which built on the ‘lesson study’ tradition to engage teachers in collegial professional learning.

My role as Deputy Principal has been to facilitate the change and development processes in the College. In doing so, I have gained some very critical insights into my profession and into the way in which notions of that profession are constructed and challenged in a dynamic and changing environment.

For some time I have struggled with what might be argued is the down side of professional autonomy (McCormick, 2000). At its worst, professional autonomy is a belief in the inalienable right of the teacher to conduct his or her lessons free from any scrutiny or accountability. A teacher who places high value on this type of professional autonomy would be characterised by their resistance to resource sharing, a resentment of intrusions into the classroom, a suspicion of imposed change and a certain lack of reflective or critical practice. To people outside of the profession, this may appear to be professional arrogance and is poorly aligned with most other professions, where systems of accountability and supervision are built in. Quite often these systems are managed and contributed to by peers or fellow professionals, which feeds into collegiate or system learning. In these professional contexts, the belief that practice occurs in private and beyond scrutiny would be anathema.

A great deal of the investment made by schools in professional development and professional learning grows out of a desire to build teacher capacity and enhance professional knowledge. This is very often provided for in a setting outside of the classroom. In Australia, as in all developed countries, there is a thriving industry of consultants, agencies and bureaucracies that attempt to cater to the professional development needs of schools. This training, though of high quality, is usually '*just in case*' learning. Typically, teachers and directors of professional development will choose courses from a catalogue as one would select whitegoods for the kitchen. This is not to say that none of these experiences are motivating or do not create change in the classroom. What is missing is quality enquiry, conversation and a cycle of implementation, reflection and improvement. Even quality professional development, tightly focused on improving student and teacher learning, remains theoretical until it is applied, tested and evaluated over time within the classroom.

Researchers such as Wang and Odell (2002) have questioned the effectiveness of any type of professional learning which leaves untouched the hallowed ground of the individual teacher's classroom. They offer four principles to inform quality, sustainable teacher learning:

- active construction and reconstruction of beliefs, content knowledge and pedagogical practices
- professional learning that is situated in the practice of teaching, relevant to the particular school-based context
- individual reflection and collaborative inquiry that develops an understanding of what constitutes good teaching practice
- substantial and sustained time to practice and experiment with a variety of approaches and resources.

In this article I reflect on an attempt in my school to challenge the notion of professional autonomy in a way which focuses on the relationship between teacher behaviour and student learning in the classroom.

The context

This self-sustaining experiment took place in a long established girls' high school on the beach south of Sydney, Australia: St Mary Star of the Sea College (<http://www.stmarys.nsw.edu.au>). The school has a history and reputation based on excellence and a deep commitment

to learning on the part of the staff. Over time, the school has reinvented itself to meet the changing needs of learners and learning. The student population represents a broad range of background and ability with students capable of acceleration in a range of subjects and others with special learning needs. The school has developed a system to support the mainstreaming of students with special needs. This policy of inclusion has brought to light a need for further development of teachers' skills in differentiation and inclusive teaching practices. This has emerged as an area of focus for professional learning and has been supported by the Coalition of Knowledge Building Schools (Groundwater-Smith, Mockler and Normanhurst, 2002).

The Coalition of Knowledge Building Schools

Developed as an agency of the Centre for Practitioner Research at Sydney University, the Coalition has grown to include schools from across the three sectors of secondary education in Australia: the public, Catholic and independent sectors. The diversity of this movement is exceptional when you also consider that the schools involved in the Coalition range from economically and culturally challenged city schools to more wealthy, independent, mono-cultural regional schools. The aim of the coalition is to share and cooperate on projects that enhance learning for students and teachers. This collaboration has seen such valuable ventures as a cross-sectoral enquiry into the environmental impediments to learning and a 'Kids' College' wherein students from around New South Wales cooperated with the Australian Museum and architects to redesign the learning spaces in the museum. Two of the central values of our Coalition are the primacy of student voice and the imperative to reflect together.

In recent years, my college has collaborated with the Coalition of Knowledge Building Schools. We have undertaken a review of professional learning and have established a process whereby professional learning must be aligned with the strategic intent of the school. Rather than outsource teacher training to a range of institutional and commercial service providers, we have established standing and ad-hoc professional learning teams. The professional learning needs are addressed through practitioner enquiry. The master class project was a deliberate attempt to push the boundaries of professional autonomy and to stimulate questions and conversations about 'our' teaching, 'their' learning and 'our' learning. The project builds on the tradition of 'lesson study', an

approach to collegial professional learning we had explored within the Coalition.

In their advocacy for the study of teaching and learning through the study of lessons Fernandez & Yoshida (2004) place their greatest emphasis upon the culture of collegiality that brings teachers together to deeply consider their practice in the context of the classroom and the diverse needs of students therein.

(Groundwater-Smith, 2007:1)

I also found useful an article entitled 'Improving teaching through Lesson Study' (Rock and Wilson, 2005) which presents a number of key features of 'research lessons'. They should be:

- focused on specific teacher-generated problems, goals or vision of pedagogical practice;
- carefully planned, in collaboration;
- observed by other teachers;
- recorded for analysis and reflection and discussed by lesson study group members.

(Rock and Wilson, 2005:78)

Will Richardson, in his blog 'The Pulse' (07/02/2007), provides a thought-provoking list of ten things we need to *unlearn* in the current educational environment including the following.

We need to unlearn the idea that learning itself is an event. In this day and age, it is a continual process...

We need to unlearn the notion that our students don't need to see and understand how we ourselves learn

The master classes were as much an opportunity to unlearn as to learn.

We borrowed the term 'master class' from the musical tradition, where, in an orchestral context, collaboration is the most vital force. A skilled musician, or visiting 'master' may offer to bring others into their practice in order to share talent and wisdom about music and performance. This analogy in our context translates into sharing talent and wisdom about learning and teaching. We did not see the term in elitist or gendered terms - we do not have two 'classes' of teacher, master and novice - but as an affirmation of our professionalism which we are developing together. A 'master

teacher' may open her or his class to observers in one session and be an observer / student in the next.

The plan

Stage 1 – Enlistment

I approached our heads of departments and sought 'kindred spirits' for the project. It was necessary to ensure that the leaders within the departments understood the challenges that the project would entail, and that they could identify people within their teams who would become the pioneers, opening the frontier of the classroom to this experiment. In most cases, it was the head of department who blazed the trail.

As it happened, it was my colleagues in the mathematics department who first accepted the invitation to be involved. This enlistment has been an ongoing task for the heads of departments, as many of our colleagues expressed terror at the idea of being observed by a group of their peers. As we proceeded, we developed processes to make this enlistment less threatening, as well as self-sustaining. Nevertheless, our first volunteers were certainly generous and bold in accepting our invitation.

Stage 2 – Planning

In preparation, we met and discussed the areas of practice, and of student learning, that seemed to suggest themselves as a good foundation for enquiry. Through our work with the Coalition of Knowledge Building Schools, we have compiled over time a significant portfolio of evidence about our practice and about the college's operation more generally. We were able to draw on this data to illuminate our discussions about a way forward. The portfolio had dealt, in some detail, with the notion of student engagement in an all-girl context, and we were aware that engagement is as much a product of the dynamic between an individual teacher and student as it is a cultural or organisational phenomenon. This assertion was derived from a series of focus groups, interviews, learning logs and parent interviews over a period of years. Through action research, we established factors for engagement and disengagement, summarised in the table below.

Factors for engagement	Factors for disengagement
T+ A quality, active relationship between teacher and student	T- A poor, passive relationship, or none at all between teacher and student

L+ A strategy for teaching broad literacy in a student centred-mode	L- Traditional view of adult-centric literacy
E+ A focus on emotional intelligence, exercised through reflective learning experiences	E- A focus on subject content without building connections to the inner world of the student
P+ Participation by students in planning for learning and assessment, through negotiation and choice	P- Little or no participation or choice by students in the learning process
V+ A forum for listening to authentic student voices	V- Student voices not heard or valued
R+ Students given active responsibility and status	R- Students passive. Contributions not valued or promoted

The conversations in preparation for the launch of master classes in mathematics considered how these factors for engagement could be observed and measured by participants in the master class. A series of observation tasks were developed which sought to capture these factors in action.

Under the leadership of the head of mathematics the areas for enquiry were framed as questions for our very first master class session:

1. If we were to track the visible signs of student engagement through the lesson, what would be the high and low points? What were the actions and strategies responsible for this?
2. Who learned the most this lesson? Who learned the least? How can you tell?
3. What is the proportion of teacher talk to student talk? Teacher questions to teacher questions? Teacher / student talk? Student / student talk?
4. How does the teacher relate to the class using the physical space of the room?

We did not know if these were the right questions but as a group we knew what we wanted to learn. As with any case of action research, knowing what we don't know is often a critical stage of enquiry. The framing of the questions was a 'teachable moment' wherein my colleagues and I were able to have a valuable conversation about

what happens when students are learning; what is observable; what is measurable; what are the important indicators of engagement; what measures will yield valuable data and eventually wisdom. These questions were loosely based on the Flanders' Interaction Analysis Categories (Lewis, 2002).

In the many master classes since this one, we have met, reflected and shaped questions to both illuminate our broad educational concerns, as well as developing questions to address more individual professional concerns. One teacher, for example, wanted specific feedback on the effectiveness of their voice. Another wanted feedback on the authenticity of her affirmation of student achievement in the class. I am impressed with the depth of reflection and professional self-awareness that generates the questions in the first place.

Stage 3 – Implementation

Students are informed that a group of teachers will be joining their class to learn something about teaching. Despite initial concerns that the presence of four or five teachers may create a false or artificial dynamic in the classroom, our results have not borne this out.

In the early phase of the project, we tried various sizes of observer groups: between two and five. It became apparent that three or four observers were sufficient to report on a range of research questions. More than this began to crowd out the classroom and fewer seemed to restrict the depth and breadth of data yielded in the reflection session. The observers are arranged along the back of the classroom or learning space. All take notes, and some use stopwatches to accurately time cumulative totals for data on questions, student talk, activity balance and so on.

Since the first master class, it has become custom and practice for the master teacher to make no reference to the observers during the lesson. This is for the comfort and confidence of the teacher rather than for any reasons of scientific validity. There is still sufficient trepidation about opening our classrooms that to simply pretend the observers are not there is probably an understandable strategy.

Stage 4 – Reflection

We ensure that time is made available for the people involved in the master class to meet for a structured reflection session. This is where the learning takes place.

Good teachers have always been reflective teachers professionals who have asked themselves questions directed to the improvement of their craft. What have been missing in my experiences have been the time, structures and forums within which collegial reflection can take place. The master class reflection has developed as a deeply respectful environment for critical questioning and sharing. It is precisely this process that turns the observation data into pedagogical wisdom.

The reflection session is led by a nominated leader who is not the master teacher. The structure of the session is tailored to the area under investigation, and very often, the questions established in the planning phase will become the scaffold for the reflection. The discussion that ensues is based on a combination of observation data and critical reflection. The discussion is recorded and moderated by the session leader, and, after each person has shared their observations and reactions, the master teacher is given a right of reply. It is especially interesting when the master teacher 'pushes back' against the observers' impressions. It is the job of the leader / moderator to ensure that the master teacher is not put in a position where they feel they must defend themselves. We have been fortunate that the climate and culture of these sessions have been good humoured, and more of a meeting of generous spirits than an opportunity for undue criticism.

I have been fortunate to attend these sessions as an observer, thus adding another lens to the enquiry. For my part, I see teachers, including the master teacher for the session, working through their perceptions to understand the distance between teacher intention and student experience. In a way, this is the most critical metric: the gap between the educational intention, generated by curriculum and professional practice (the teaching), and the change that actually takes place within the student (the learning). Our aim is to use these tools to narrow the gap.

After a process of structured sharing and responding, the moderator guides the group to collate a list of explicit 'learnings' from the master class and reflection. These are expressed as brief, practical and tested ways of improving our practice. Below is a list of learnings generated from the observation and reflection on an advanced calculus class by four colleagues. They do not represent deficits in the master teacher's lesson, but are the product of collegial reflection:

- Explore a range of possible mathematical solutions, to allow paths into learning for different students.
- Balance general class questions with questions to students by name.
- Ask powerful open ended questions like “You are right, but why?” and “Look at what we have done. What am I going to ask you to do next?”
- Challenge patches of disengagement by insisting on particular students answering a question.
- Position your body when you write on the board so you can engage the students at the same time.
- Investigate why students aren’t confident enough to challenge errors the teacher may make in the lesson.

Stage 5 – ‘Conscription’

We have been challenged by the notion of sustainability in professional learning. Communities of practice do not develop automatically. They require stimulation, distributed leadership and systems for regeneration. We have adopted a practice whereby participants in the master classes feed back into the action learning cycle. Each of the observers chooses one of the master class learnings that he or she will grow in his or her own classrooms. This is how the conclusion to the reflection session is managed. Participants, in turn, nominate the learning they will focus on in their own practice and their reasons for choosing this skill, or idea to develop. Finally, one of the observers nominates themselves as the subject of the next master class. Thus, we have built a life-cycle into the master class project and are assured that, without explicit management by the school administration, teachers will continue to open the doors of their classrooms to their colleagues and thus contribute to our shared wisdom about how students learn.

Outcomes

The project is almost twelve months old and has already borne rich fruit. Many of the positive outcomes relate directly to measuring the gap between teaching and learning. Yet, it is the other unplanned-for outcomes that make this approach to professional learning so valuable. The teachers who have been involved in the master classes as observers are very likely to open their own classrooms to their peers. Beyond the actual lesson studies, our teachers are finding other ways to include their colleagues in their professional reflection, either as visitors to the classroom, or through informal mentoring.

The teachers who have made their lessons and students available for master classes have reported a sense of professional pride, and have received significant affirmation from the colleagues for their skill and care for their students. It is outcomes such as these that flow from the development of a professional learning culture that are unlikely to result from the traditional, outsourced professional development experience.

Caveats and conclusions

As we grow through this project, we are once again learning what we do not know. Most significantly, we do not know what our students think and believe about the master class project, about the validity of the measures we are using and about the effectiveness of the changes in pedagogy that result from the action research. The absence of student voice in this experience challenges us to look for opportunities to draw the consequential stakeholders into the reflection cycle.

A second caveat is that we must resist seeing master classes as reinforcing a teacher-centric paradigm. It may be tempting to allow this process to give power to the view that the teacher is the subject of any lesson. Our professional community will be looking for ways to use these powerful reflective tools to encourage a student-centred paradigm of learning.

In conclusion it must be said that master classes are really for teacher-learners, not for master-teachers. If anything, master classes are about mastering our own learning about ourselves and our craft.

It is said that the most powerful part of lesson study is that you develop eyes to see the children learn (Stepanek, 2001).

I think we can say with some confidence that our adaptation of the lesson study approach has made a major contribution to the enhancement of our ability to see children learning and to evaluate our teaching in the light of this.

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