

#SILO'S MUST FALL: LESSON STUDY AS A STIMULUS FOR TEACHER COLLABORATION

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The research I draw on in this paper explores, through explorative case study, mathematics teachers' reflective practice mediated through participation in an adapted lesson study. The study seeks to gain insight on mathematics teachers professional learning mediated through an adapted lesson study approach. The participants of a local community of inquiry focused their joint enterprise on exploring the teaching of foundation and intermediate phase mathematical curriculum content. In this paper I focus on a narrative of one teacher's learning to illuminate her reflective practice that emerged from her participation within the teacher driven lesson study.

Key Words: Lesson Study; Mediation; Community of Inquiry; Reflective Practice; Collaboration

CONTEXT OF THE RESEARCH

In South Africa (SA), as in other parts of the world, educational attention often focuses on subjects such as mathematics and science. Educational reform initiatives in the United States have also recognised that teachers are key to achieving learner improvement (Stigler & Hiebert, 2009, 2009). There is renewed interest and focus on cluster teacher practice through in-service teacher training in order to improve the educational system in particularly in mathematics and science in SA (Jita & Mokhele, 2014; Mitchell & Jonker, 2013; DBE, 2011). Ball and Cohen (1999) highlight the importance of access to and participation in communities of practice that is linked with a wider discourse towards a localised network or subject matter organisation that will result in a group support and guidance through a community of practice (Borko, 2004).

Graven (2005, 2012) argues from her experience that teacher development projects in South Africa allowing long term teacher support which position teachers as partners and in which their experiences are taken as the basis from which engagement and learning takes place, enables teachers to re-invest in the profession with increased passion and confidence. A key criticism of Curriculum 2005 was that the use of the short-term cascade model where teachers were trained and had to return to their schools and train their colleagues, left teachers largely unsupported and led to a watering down of key concepts. Similarly, international traditional methods of professional development have been criticized for being decontextualized providing only a patchwork of opportunities stitched together into a fragmented and incoherent curriculum (Ball & Cohen, 1999). Traditional models see knowledge or information transmitted from the top down with “training-the-

trainer” to ensure that the message “flows down” from experts and specialists, eventually to the teachers (Ono & Ferreira, 2010, p.61).

It is generally recognised that teachers’ competence and disposition towards practice and the teaching profession influence the learners’ performance in the classroom and subject (Spaull, 2011; 2013; Graven 2009; 2005; Lee, 2005; Ball & Cohen, 1999). According to reports from Atweh et al.’s (2014) and Reddy’s (2006) teachers are not being prepared for the diversity of the contexts of teaching and learning practice such as poverty in low-income countries such as SA. I would present that for in-service teachers an alternative would be to invest in localised school based professional learning that address contextual diverse needs. A strong critique of teacher development is the tendency to prepare teachers for some ‘ideal classroom context’ (Atweh et al., 2014, p.42) that possibly miscue the contextual needs of the low-income school community. In the ideal classroom context learners are assumed to have the required competence for learning in the grade level they are placed, where class sizes are manageable and where conditions of poverty and high levels of absenteeism do not exist. Similar to the lesson study approach, Atweh et al. (2014) propose that teacher education should prepare and support teachers on site (school-based or practice-based (Ball & Cohen, 1999)) to teach within the specific challenges of their school context. The lesson study ideas is underscored by Brodie (2013) who argues that school-based professional learning communities should allow teachers to jointly engage on a shared vision of what amounts for good quality teaching and learning and begin to take collective responsibility for the learners they teach.

In this respect much of the literature reviewed, points to the need for localised in-service support of teachers on site in their schools and classrooms (Atweh et al., 2014; Brodie, 2013). The Department of Basic Education (DBE) and the Department of Higher Education and Training (DHET) (2011) have more recently promoted a shift towards more localised in-service teacher development approach in their *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa*. I surmise that a localised teacher-led development model would afford teachers the opportunity to engage with other teachers’ who practice in similar contexts. This promotes a shift from a university research/ project base to one which includes and is driven by school-based (practice-based) teachers. In this way teachers develop agency to assist and support other members within the immediate community because many higher education institutionalised support programs are disconnected from the on-the-ground complex issues of curriculum and learning (Ball & Cohen, 1999).

This paper draws on a broader research in which I (the first author) investigate a teacher driven on-site Community of Practice (COP) focused on lesson study. As researcher participant my role in the collaborative inquiry mode on the nature of reflection within the lesson study involved analysis in the context of knowledge, power and reflexivity in participants’ personal and professional practice (Hickson, 2011). The lesson study is thus the vehicle for stimulating teacher reflection on practice (and the empirical field of the research) aimed at strengthening future lesson planning and implementation on a

particular mathematics topic chosen by teachers. This study is supported by Graven (2nd author and South African Numeracy Chair) as part of the SANCP which aims to search for sustainable ways forward to the challenges of primary mathematics education in SA.

LESSON STUDY

My research draws on the lesson study approach to stimulate teacher reflection because I was interested in the nature of teacher learning during the design and implementation process of a lesson. Thus, lesson study is a teacher-oriented and teacher-directed practice where teachers with a common focus meet and plan lessons together. These lessons may also have a focus on building skills or understanding, and are known as *research lessons*, which are taught by one participating teacher, and observed by not only all of the teachers who are doing the planning, but also by observers who, at one end of the spectrum, may come only from the teachers' own school or from outside such as university or expert teachers (Fernandez, Cannon & Chokshi, 2003; Takahashi & Yoshida, 2004; Lewis, Perry & Murata, 2006; Doig & Groves, 2011).

A lesson study community can be viewed as a community of practice/inquiry (Lave & Wenger, 1991; Wenger, 1998; Jaworski, 2004) in that teachers meet regularly to engage with a shared enterprise and develop a shared repertoire of inquiry into practice. The shared development and learning will be manifested during the lesson design and implementation stages through a reflective process. Jaworski (2004) highlights that a learning study (as distinct from lesson study) is predominantly used by teachers to research learners' attitudes and understanding through developmental process involving a designed activity. Since my focus is on teacher reflective learning (rather than on learners), I use the term lesson study rather than learning study. Thus my interest involves a community of practice where teachers initiate and drive the agenda for the programme in a localised context. In line with the lesson study process the role of the more knowledgeable (Lewis & Perry, 2014) were shared between myself (first author-intermediate phase) and a foundation phase teacher with more than thirty years' experience which is also a cluster leader in the school district level.

TEACHER LEARNING COMMUNITIES

Over the past decade literature reveals some common characteristics in theories of community namely: collaboration, collective responsibility, shared values and vision, concern for individual and minority views, meaningful relationships, reflective personal inquiry, collaboration and promotion of group as well as individual learning (Grossman, Wineburg & Woolworth, 2001; Wenger et al., 2002; Stoll et al., 2006). I was particularly drawn to the theoretical framing of learning being embedded in communities of practice by Lave and Wenger (1991) and Wenger (1998) which refers to participants who share common actions, procedures and goals. Participants in the community of practice have a sense of belonging, share a concern or passion about a topic and deepen their knowledge and expertise by interacting on an ongoing basis (Wenger et al., 2002). While their

definition of a community of practice coheres well with my research, the work of Jaworski (2004) builds on Wenger's (1998) theory and definition to foreground the importance of critical inquiry within communities of practice and she thus proposes using the term 'Communities of Inquiry' (COI) instead to foreground this aspect.

Recent research suggests that the establishment of professional learning communities promotes teacher capacity building for sustained improvement (Stoll et al.'s, 2006). This involves groups of teachers within or outside a school sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-orientated, growth promoting way operating on a collective enterprise. This approach differs from a learning community because it is concerned with schools and departments as mediating contexts for teaching. Similarly, a community of inquiry (COI) or community of practice (COP) share many features of the professional learning community, but affords more ownership to participants without explicitly dictating the activities of the group. A community of practice can address both professional and pedagogical practices through activities which evolve and manifest according to members of that community. Communities of practice can in effect become learning communities which, in turn, can contribute to the professional growth of the individual (Wenger, 1998; Wenger, McDermott, & Snyder, 2002). Teacher communities that are situated within the realities of a school evolve within their particular environment and, through teamwork and dispersed leadership, they build the professional capacity to solve problems and make decisions.

LESSON STUDY as a form of professional learning

Within the Japanese context, lesson study primarily focuses on teacher professional learning which is driven by the need to both extend and renew teachers practice, skills and beliefs (Doig & Groves, 2011). The reciprocal nature between teachers' development/learning and learners' outcome considers that the more successful learners are in learning, the more likely teachers will be to adopt practices that encourage further professional learning. Doig and Groves (2011) emphasise that teachers learn best by doing [teaching mathematics] and building their own understanding rather than being told.

Thus opportunities to experiment with classroom practice and analyse it in detail—an important feature of Japanese Lesson Study—is likely to be a fruitful path to take in teacher professional development (Doig & Groves, 2011, p.78). The lesson study approach affords teachers to do the mathematical learning opportunities through jointly developing a research lesson in which all the participating teachers share an interest. The lesson study is not about perfecting a lesson, but rather focuses on developing teachers' ideas and experiences of different approaches to teaching (Doig & Groves, 2011). The research lessons allow for a natural process of examining and making meaning of the experienced through reflective and reflexive action by each individual.

Desimone and Garet's (2015) discussion about best practices in teacher professional development (TPD) in the United States (U.S.) argues for the need for a conceptual

framework for TPD based on *five core features* as opposed to the idea of the *structure* of a TPD programme. The tested five key features they suggest that make professional development effective are:

(i) *Content focus* – activities that are focused on subject matter content and how learners learn that content. (ii) *Active learning* – opportunities for teachers to observe, receive feedback, analyse learners’ work, or make presentations [lesson study model], as opposed to passively listening to lectures. (iii) *Coherence* - content, goals, and activities that are consistent with the school curriculum and goals, teacher knowledge and beliefs, the needs of students. (iv) *Sustained duration* – [T]PD activities that are ongoing throughout the school year and include 20 hours or more of contact time. (v) *Collective participation* - groups of teachers from the same grade, subject, or school participate in [T]PD activities together to build an interactive learning community (see Desimone, 2009).

In figure.1 below, I use Lewis and Perry’s (2014) model to illuminate how a lesson study can contribute towards teacher (-s) professional learning.

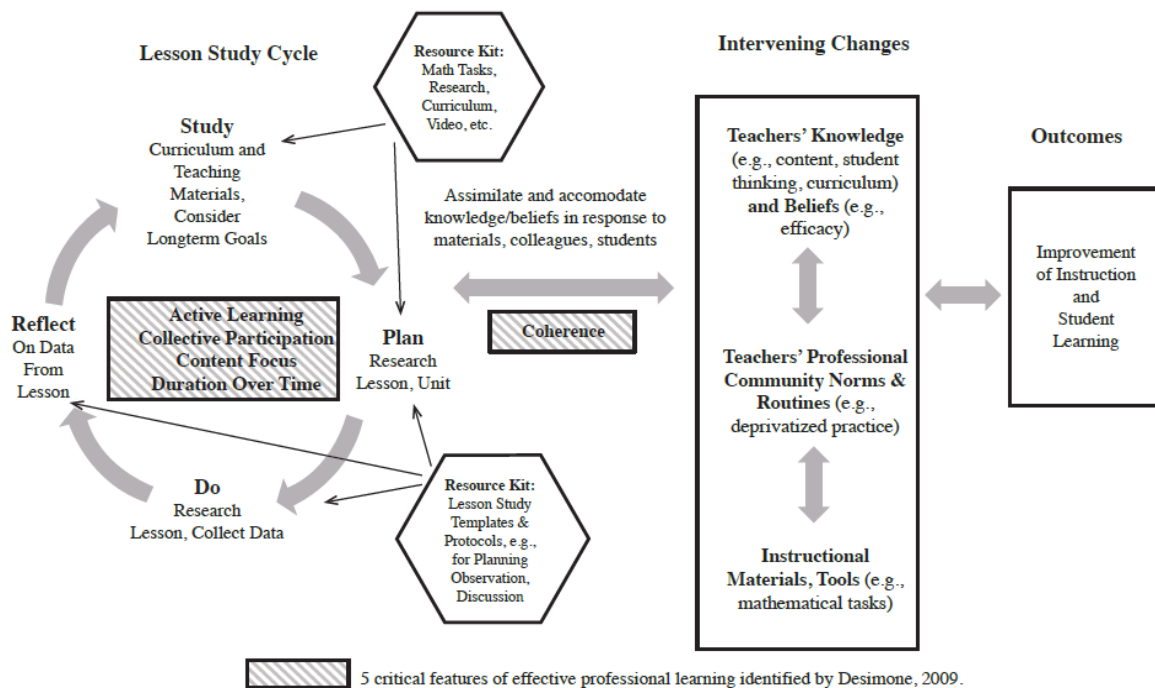


Figure 1: Sustainable model for professional learning: Lesson study supported by mathematics resource kits (Lewis & Perry, 2014, p3).

The striped rectangle in fig. 1 connects well within the cyclic lesson study model. The key idea is that by improving the quality of teaching, it directly impacts on the quality of learning through coherence of teachers’ knowledge/ beliefs in response to materials, colleagues and learners. Desimone and Garet (2015) argue that these are the five key features for effective professional development programmes. The gained insights, which focus on five ideas: (a) changing procedural classroom behaviour is easier than improving content knowledge or inquiry-oriented instruction techniques; (b) teachers vary in response to the same TPD; (c) *TPD is more successful when it is explicitly linked to*

classroom lessons; (d) TPD research and implementation must allow for urban [rural] contexts (example, learners and teacher mobility); and (e) leadership plays a key role in supporting and encouraging teachers to implement in the classroom the ideas and strategies they learned in the PD. The italics in (c) above underscore the importance of the explicit link of actual classroom lessons developed by the teachers themselves alongside other teachers that potentially might influence the practice of individual teachers through collective participation and reflection.

REFLECTION as a key tool for inquiry into practice

My own experience of reflecting on my teaching practice, allowed me to question how I should adjust my lessons to enable those learners who did not grasp the concepts taught in the lesson. Watson and Wilcox (2000) capture my idea of reflection as a valuable way to enhance learning while in the midst of professional practice. Reflection encouraged me to ask challenging questions about ordinary moments in the classroom situation: What is my role in the classroom? Why did I do what I did and what might I do differently next time? How did learners respond to what I did?

Many education research studies underscore the usefulness of reflection (Schön, 1983; Adler, 1997) as a tool that enables development in teaching and learning. In my broader study I investigate the nature of teacher reflection on a particular topic of teaching and how teachers' may or may not develop reflective practice through participation in a local lesson study community of teachers. Schön (1983) distinguishes between reflection as *in-practice*, during the actual teaching situation ("noticing in the moment" (Mason, 2001) and *on-practice*, after the actual teaching situation of a lesson. My research mainly focuses on the teachers' reflection on their practice after actual teaching and will thus foreground *on-practice* and therefore will background *in-practice*. Thus I acknowledge both types of reflection rather than ignoring one practice in place of the other because teaching a lesson is a complex process that entails different stages from the planning, actual teaching (implementation) and looking back on the lesson as well as looking forward to make sense of your own practice and make a change. Both reflection and inquiry are seen to be a thoughtful, systematic and active learning process into teachers' individual practice to enhance meaning through a community of inquiry (Jaworski, 2006). This provides a space for professional conflict that challenges in-service [practice-based] teachers to reconsider their personal assumptions through rigorous inquiry that is based on the ethic of care and trust (Brodie, 2013). In particular, collaborative teacher inquiry is well suited to enabling development/growth of both individuals and the wider educational community in mathematics education (Jaworski, 2006).

RESEARCH FOCUS

This paper emerges from my broader research that inquires how teachers' reflection on practice through a collaborative model of lesson study potentially can transform reflection on practice (Ghaye & Ghaye, 1998).

METHODOLOGY

This paper and the broader research from which the study emerge are located within an interpretive framework which coheres well with the sociocultural perspective that is concerned with the collective processes and individual processes of learning generated by participation in social activities (Cobb & Yackel, 1996). As a participant-observer, I endeavoured to listen and observe alongside participants through what they say and how they act in purposeful ways (Gillham, 2000). The research adopted an interpretive qualitative case study approach. The empirical field for this research is the local community of inquiry of primary school teachers - the joint enterprise of learning through participation in a lesson study of any mathematical topic. The lesson study involved collaborative inquiry in which I have been a participant observer involved in joint lesson planning, implementation and reflection on practice (a form of teacher collaborative action research – the relationship of teacher action research to lesson). The data in the case study which is underpinned by a community of inquiry includes teacher participants' utterances and actions during the lesson study process. All the case study participants involved post level one teachers from the same school who met after school including myself (first author) who also managed all the administrative tasks.

My analysis have drawn primarily on Wenger's (1998) dimensions of practice within a COP example (i) joint enterprise (negotiated enterprise; mutual accountability; interpretations; rhythms; local response) (ii) mutual engagement (engaged diversity; doing together relationships; social complexity; community maintenance) and (iii) shared repertoire (stories; styles; artefacts; discourses; historical events; concepts). These were supplemented with Jaworski's (2005) extension of critical reflective inquiry as an essential element of each of these dimensions (as discussed above). These dimensions provided an analytical frame and language of description for analysis of to data gathered from transcriptions.

Lerman (1994) cited in Goodell (2006), sees critical incidents as a way to foster reflection in teaching, and found that comments from supporters and co-learners are essential in helping to "stimulate the consciousness of reflection" (p. 63). These results were described, analysed and interpreted to extract the relevant meaning. In addition, I have used video recording material to identify some critical incidents which explicate Kate's utterance and actions in the lesson study process that relates to her reflective practice through collaboration with other members of the group.

For the broader study I used an explorative case study where the case was one group of in-service mathematics teachers participating in one adapted lesson study. The participating teachers met weekly to identify a certain mathematical topic to be researched and planned a lesson towards its goal and one volunteer or nominated teacher is responsible to teach the planned lesson. The following week the nominated teacher teaches the research lesson in his/ her own classroom in an after-school session for his/ her particular grade class. All the participating teachers taught mathematics in the same school. The study further explored how teachers across the foundation and intermediate

phase, jointly research mathematical lessons which are a concern in their own practice through their reflection. The sample consisted of six participants of which included the first author (both observer/ participant). In this paper, I have chosen to share the story of one teacher, Kate, in order to illuminate some of the preliminary findings of this research.

In the initial meeting I shared with the teachers my willingness to co-ordinate and research this lesson study process and would discuss key aspects of lesson study (Coe et al., 2010). The group negotiated the adaptation of the lesson study so it could fit our own purpose while the ‘joint enterprise’ was about collaboratively designing and reflecting on teaching practice in order to strengthen it. Additionally, I emphasised my role as co-learner and co-participant in the learning process (Wells, 2009).

The sample data of Kate’s narrative was both an opportunity and a convenience sample (Cohen et al., 2000) that was obtained through data transcriptions of recorded lesson study sessions (with the unit of analysis being teacher reflective communication – spoken, written, action) and interviews of post-lesson presentation debriefing sessions as well as interviews at the end of each cycle.

A vignette of one teacher: Kate’s story

In the following section I present a vignette of Kate’s story. Kate has seven years’ experience teaching grade two mathematics. The sample data illuminate how the teachers’ participation in this community of inquirers impacted on her professional learning. In the following passage, I present Kate’s semi-structured interview comments about her participation in the lesson study programme. I present some critical incidents of the whole semi-structured interview due to space limitations.

Kate’s comments when asked: “How do you feel about your participation in the programme [lesson study]?”

Well I don’t know like I said from the beginning I was a bit skeptical at the start because I was scared about my curriculum knowledge besides like [programme] broader than the grade 2 level. And ... and that was one of my initial concerns. And I realise now that throughout the curriculum like the things they overlap. You know what I mean. What happens in grade 2 the same stuff is going to happen but obviously more advanced and so that my one fear was taken away. But number one what I learnt was how to make maths fun again and the sharing of ideas. ...and you know learning from your peers ... discussing everything afterwards. Watching the lesson and then also seeing you know ... yoh we have this idea it did not quite work out the way that we wanted to and learning how to kind of adapt and go with the flow ... you know (Interview, 23 June 2015).

The above piece seems to show that initially Kate was concerned and uncertain about her own curriculum knowledge when engaging with other teachers at the same school during the lesson study. She also expressed an awareness of basic concepts in the foundation and intermediate phase mathematics curriculum that are similar and overlaps and also advances in complexity and difficulty per grade levels.

Kate seems to value learning from other teachers. Thus, she mentions that she learnt how to make mathematics fun. Further, she promotes that sharing and discussing mathematical instructional and teaching practice ideas contributed to her personal development/learning. She also presents that through watching a live lesson and seeing what worked and what did not work influenced her to also adapt/change her own way to alternative ways.

And ... so it has open up my mind ... in general my mind you can say my mind is open up a lot more than... than it was. I was very set in my ways and the way I taught certain content such as halving, doubling, or time whatever it was. I taught in the same way year after year after year. And when there were kids struggling with stuff like that I would try helping them individually but I would ... I didn't even take a look back and said Kate is it not your teaching (expressive) that is maybe the problem. So this has also taught me about like self-reflection and taking like a good critical constructive criticism basically. Look at my own way of teaching and you know there is so much we can do ... but we are very quick to blame the curriculum. We are very quick to blame overcrowded classrooms and the kids ... (deep breath) and we often forget to look in the mirror and blame ourselves (relief sign laugh) as well (Interview, 23 June 2015).

The above piece shows that Kate reflects deeply on her own practice from a cognitive demand perspective, as an enabling aspect of lesson content that drives learning by the teacher. Thus her personal voice seems to indicate a self-questioning of her way of teaching that focus on her personal contribution through her instructional practice. In this regard through introspection of how she self can change her approach in teaching concepts such as halving and doubling is manifested. Importantly Kate seems to be critical towards her own practice when she expresses – “So this has also taught me about like self-reflection and taking like a good critical constructive criticism basically. Look at my own way of teaching and you know there is so much we can do ... but we are very quick to blame the curriculum”. Within the context of collective engagement Kate seems to recognise that certain systemic factors such as overcrowded classroom is no excuse for not trying alternative ways to teach concepts in mathematics. The following italics phrase perhaps expresses Kate's personal inquiry experience through her personal dialogical on her own practice – “*we often forget to look in the mirror and blame ourselves*”. Kate seems to challenge her own abilities not to become too set in her ways in teaching certain concepts year in and year out.

And it was very interesting watching somebody else ... I have never observed another person's lesson in my life before. And it was very interesting actually sitting back and watching another educator giving the lesson where I am normally in that position. It was ... quite an eye opener (Interview, 23 June 2015).

Kate assertively expressed that she has never observed another teacher teaching a lesson. This was a profound experience for Kate and she seems to value this opportunity with interest to observe another teacher. This seems to illustrate the actual private nature of

individual classroom teachers teaching practice at school. On the other hand the live lesson observation seems to allow Kate to experience what learners actually go through when in class. Thus the live lesson seems to present an opportunity to observers that go through the motion as indirect learners to the teaching situation. Perhaps the live lesson exposed a glimpse of some of the complexities teaching and learning entail in real teaching situations.

I always ... my eyes always looked out to the classroom, and to the kids in front of me and to everything on the walls. And I have never ever basically been in that position looking back at me (high tone – stress - me) although it wasn't me presenting you know what I mean. Looking back at the teacher and hmm ... that is a vital aspect of teaching. We want success in our classes (slight affirmative laugh) we need to take a look at ourselves (smiles) (Interview, 23 June 2015).

In the above piece Kate seems to realise that as a teacher she orchestrates the potential learning that will take place. Kate seems to view teacher reflection as a vital aspect of teaching. Perhaps promoting that teachers need to reflect daily not only what and how learners learn but also reflect how I as a teacher can contribute to the success in the classroom. Kate seems to argue that for learners to be successful, it depends on how successful the instructional teaching of the teacher is. She also promotes that teachers are the driving force for success in the classroom but needs critical engagement by the individual teacher.

And you can't criticise one person anyway because we all [planned the lesson together]... we all. If something works you all get the thumbs up and if something's fails you all get criticise [soft affirmative laugh] because it is a group ... group effort although there is the one teacher presenting. That is all of our minds in that one presentation [affirmative laugh]. So you know the observations ... the things we pick up basically also gives us the thumbs up or the thumbs down. And it is all done in a friendly and open environment I felt (Interview, 23 June 2015).

In the above Kate shows that the lesson study features of collective ownership for planning and presentation of the lessons are valued. It also seems to speak to the isolation many teachers experience where they plan and prepare lessons. The lesson study collaboration between teachers seems to prevent tailgating and allows spontaneous actions from members within the confines of group ownership. She also recognises that the research lesson is not about designing and developing a perfect lesson but to explore the effect of such a lesson with learners. Thus she expresses that the private or isolated (silo's) can be overcome through the lesson study approach. Further, Kate presents that the lesson study approach provides an open environment, hence more public without prejudice or fear.

Implications of Kate's story

Kate's story illuminates some of the potential of the adapted lesson study.

It perhaps shows how to bridge the gap between foundation and intermediate phase teachers' through collective engagement on mathematical topics, irrespective of the teachers own content knowledge. Furthermore, it exposes the importance to become self-reflective about actual and potential teaching practice that can possibly enable change as to improve teachers own teaching and improve learners learning. It also highlights the value of observing an actual live lesson presentation as a way to experience and see (through someone else's eyes) how learners learn in the moment. Through this experience teachers knowledge and understanding possibly allows a deeper appreciation of their own role to improve learners learning in the goal of quality education. This story shows how powerful distributed leadership can be where individuals as members of a group take collective ownership for their own learning at their own school. Kate's story shows that her reflection/inquiry on her own practice allowed her to begin to examine and question her practice within a collective domain. Kate's experience within the lesson study seems to have influenced her personal practice and provided a space that enhances her understanding of how to teach mathematics in a creative way in her classroom. It affirms how powerful collective participation can be where teachers engage with a shared enterprise and develop a shared repertoire of inquiry into practice (Lave & Wenger, 1991; Wenger, 1998; Jaworski, 2004).

CONCLUDING REMARKS

Kate's story in this paper shows that using an adapted lesson study outside Japan's traditional way can be used to promote professional learning within a school community. The research highlighted that the cyclic features of the lesson study are bound by teacher reflection during post presentations. Schön (1983) proposes that a practitioner's (teacher) reflection enables a structure of professional inquiry which underlies many varieties of design, herein a localised inquiry cluster model. It presents that in Kate's case she moved from merely questioning her own practice towards looking for alternative ways of teaching halving and doubling to grade two learners. This encapsulates Kate's position as a novice participant in the lesson study as she gained insight about their own teaching through the eyes of others in the community of practice.

The study indicates that when teachers come together and open up their private space of how they teach, then active professional learning occurs. This leads to a more public way of engagement where collective ownership are shared by the group members based on a shared long term goal.

This opportunity to advance from practice-based knowledge and experience requires possibly some critical areas by expansion of professional roles such as reflection and collaborative inquiry to close the gap between research and practice, reducing the isolation of practice and optimizing translation of values into practical meaningful practices. A promising approach to this type of shared inquiry and learning is to build communities of practice based on diverse expertise and designed to scrutinise and improve the way teachers work (Wesley & Buysse, 2001).

While there is much international research emerging on teacher learning within lesson study systems (Yoshida & Fernandez, 2004; Lewis, 2002; Stigler & Hiebert, 2009) there seems to be a gap in the South African literature because little research has zoomed into the current nature of teacher reflection in a lesson study approach. This research acknowledges that future research needs to be conducted to explore further possibilities of the use of the lesson study approach within the South African context.

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