

## Teacher-talk in contexts of Lesson Study: how teachers learn.

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### Background

Lesson Study is a collaborative, classroom-based, professional learning and practice development activity which evolved in Japan over a 100 years ago and is now in widespread use there and elsewhere in East Asia. It has only been in use in the West for 10 years. During Lesson Study a group of teachers collaboratively plan, teach and observe a series of 'research lessons' designed to solve a teaching problem or refine an existing practice still further. They then share their findings with colleagues - through presentation, summary paper or through public teaching.

Between 2003 and 2009 the researcher was a TLRP Research Training Fellow leading a project entitled: 'Lessons for Learning: Using Lesson Study to innovate, develop and transfer pedagogic approaches and metapedagogy'. This fellowship was linked with the TLRP 2002-2005 project 'Learning How to Learn in Classrooms, Schools and Networks' led by Professor Mary James.

There were two phases to the research. The first involved a two year pilot. This was aimed at establishing the degree to which Lesson Study, might work in England. The pilot involved 20 primary and secondary schools from 8 local authorities. Additional support and funding for the involvement of the teachers and schools was provided by NCSL and CfBT.

Phase 2 set out to shed important light on the 'black box' of teacher professional learning and to discover what happens when teachers engage in classroom based collaborative enquiry based learning through Lesson Study.

Lesson Study is a teacher learning model which has been promoted by the National Strategies and has begun to be used by many hundreds of schools in England. The Lesson Study cycle has been used by leading teachers to help in the development and transfer of successful pedagogic approaches from school to school.

### Research Questions

1. What are the affordances and barriers to teacher learning offered through Lesson Study's linked processes of collaborative inquiry, lesson design, joint observation and post lesson discussion?

- What kinds of teacher talk characterise teacher collaboration in Lesson Study groups?

- How can teacher talk be understood to mediate teachers' learning in Lesson Study groups?

2. Is there a distinctive contribution by Lesson Study to teacher learning?

### Methods

The Phase 1 research involved conducting a literature review of the field and a pilot study in which teachers from 20 schools in different contexts and phases, engaged in developing Lesson Study in their schools. Data collected included: notes of the termly meetings of the pilot teachers where they shared the outcomes of their Lesson Studies, the Lesson Study materials themselves, transcripts of video interviews and transcripts of structured group discussions about their experiences with Lesson

Study which were gathered at regular intervals over the course of the two years. Quantitative and also qualitative evidence of the effect of Lesson Studies on pupil learning was also gathered.

Phase 2 of the research used a double case study design following the detailed discussions of two sets of teachers as they plan and evaluate the teaching and learning at each stage of a cycle of research lessons. The groups of teachers videotaped themselves going through these processes and also kept materials and data they produced, gathered and used during the process. The research involved collecting and transcribing over 7 hours of this discussion. In one school the curricular focus was literacy and in the other it was mathematics. Both schools focus on children in Year 4, (8-9 year olds).

During the course of the categorisation of their spoken interactions, it became clear that the three talk types which Mercer\* (1995) observed being used by pupils engaged in collaborative group learning, were also useful for the purposes of this analysis of teacher talk. Mercer's talk types are: 'disputational talk', 'cumulative talk' and 'exploratory talk'. These were evident in the discourse alongside two other categories which were used to manage the sense and flow of the discussions.

\*(Mercer, N., (1995) *The Guided Construction of Meaning*, Trentham Books, London)

### **Frame**

Nearly five hours of the transcribed discussions were used in a broadly inductive process of analysis of the discourse features and knowledge references used by the teachers as they engaged in collaborative, classroom-based, enquiry-led learning. Codes and categories emerging were re-analysed both quantitatively and qualitatively as themes and later findings also emerged.

The similarities and differences in the patterns and frequencies of the discourse features and talk types across the two case studies were noted along with any relationships with changes in the evidence of the dispositions, beliefs or knowledge of participating teachers.

20 minute interviews were also conducted with the teachers participating in the two case studies, as well as with the head teachers of the two primary schools. These were also transcribed and analysed.

### **Research findings**

A number of common themes emerge across both cases which are linked to the research questions. They concern:

- The ways in which the groups of teachers establish a pupil learning focus
- The effect which 'case pupils' have on the teacher learning process
- The ways in which members of the Lesson Study groups establish roles and build relationships within the two groups
- The ways in which the two groups interact together in order to accomplish the production of collaborative research lesson plans, and to conduct research lessons and post lesson analytical discussions
- The identification of elements and patterns of spoken interaction which are key to the teacher learning and practice development which takes place
- The ways in which the research lesson plans draw particularly on the group members' knowledge of curriculum, subject, pupils, and pedagogy.
- How the groups utilise their first hand data of case pupil behaviour, gathered during the research lessons and from pupil comments in interview, and how this contributes to the new knowledge the teachers gain
- How the members of both groups change their subsequent teaching as a result of what they have learned during the Lesson Study

- Features of the processes of practice transfer and practice adoption seen in both case studies.

Key to some of these common themes and to the teacher learning which happens in Lesson Study, is the way in which the groups of teachers build up and collectively own the research lesson they conduct - and the findings thereof. The deliberate process of Lesson Study so focused on the joint observation of learning of children in the research lessons, is important in helping to create a collective group ownership of the process, the research lesson and the knowledge outcomes. It also helps to suppress some affective factors which can inhibit teacher learning in a group while promoting others which help to generate learning - including a process for moving from practice knowledge which is individually held and tacit, to practice-knowledge which is shared, reified, and explicit.

So the Lesson Study process focuses participant teachers' attention on the effectiveness of the lesson - and not on the effectiveness of the teacher. This minimises the sense of vulnerability often felt by teachers in an observed lesson and exploits the potential for teacher learning offered by collaborative, classroom based, practice-focused enquiry.