Lesson study: what is it and why should you be interested?

Michael Jopling, University of Wolverhampton
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Overview

1. What is lesson study (and why am I interested in it)?
2. How has it been adapted in schools?
3. What does the research into lesson study tell us?
5. Where next with lesson study?
The rise and rise of lesson study in England

• Imported from Japan/USA, esp after 1998.
• Central to the National Strategies’ Leading Teachers (LT) programme, 2008-10.
• Involved 1175 primary schools in 92 LAs (61% of all LAs).
What is lesson study?

• A powerful, professional learning approach that can dramatically improve learning and teaching and the practice and subject knowledge of teachers.

• Lesson Study has over 140 years of history in Japanese schools.

• Can produce improvements in pupil achievement and professional learning *and* it is also very popular with all who experience it.

http://lessonstudy.co.uk
Why am I interested?

• Powerful form of collaborative professional learning.
• Enquiry-driven.
• Highly adaptable to context.
• Evidence of impact at multiple levels – from practitioner to locality:

“Having a third party watch children's response to my teaching has given me a new perspective to inform my planning” (Teacher)
Characteristics of Lesson Study

- A shared goal among participants
- Focus on learning in a particular content area
- Careful study of student learning, based on evidence
- Joint planning of the study lessons by the group in ‘dialogic space’.
- Live observations of study lessons by members of group
- Passing on knowledge of what has been learned to others

(Adapted from Perry & Lewis, 2009; Warwick et al, 2016)
The Lesson Study Process

What Learning Occurs At Each Part of the Cycle?

- Develop Research Theme, Connect Long-term Goals to Daily Teaching
- Study Other Research or Curriculum that Expands Knowledge
- Reflect on Own Practice, Beliefs
- Study other colleagues’ and student ideas
- Relations with Colleagues Change
- Learn maths as you solve task, consider colleagues’ and student ideas
- New Views From Commentator, Colleagues
- Make Tacit Ideas Explicit; Confront Different Ideas, Negotiate with Colleagues

Reflect

- Experience lesson from student viewpoint
- Students have more capacity than we realized!
- See impact of classroom routines, lesson elements
- Take Risks You Would Not Take on Your Own

Plan

Teach

www.lessonresearch.net
Lesson study process (1)

1. Analyse your data and identify your research focus.

2. Identify your lesson study group.

3. Connect with, and draw on, what is already known about your focus before you start work (including knowledgeable others).
Identifying your focus

Learning and progress to be improved

Curricular strand from Primary Framework (e.g. problem solving or discursive writing)

Teaching technique or pedagogic solution to be developed (e.g. guided practices)

Case pupils' needs

http://lessonstudy.co.uk/the-lesson-study-process/
4. Identify 2-3 case pupils (or multiples of 2-3).

5. Jointly plan a research lesson based on the needs of the case pupils.

6. Teach and jointly observe the study lesson.
Lesson study process (3)

7. Interview the case pupils/analyse student work.

8. Hold a post-lesson discussion.

9. Mobilise the knowledge - find ways to share the learning from your lesson study.

The Lesson Study Process

What Learning Occurs At Each Part of the Cycle?

Develop Research Theme, Connect Long-term Goals to Daily Teaching

New Insights Into Own Curriculum and Standards from Joint Study

Study Other Research or Curriculum that Expands Knowledge

Learn maths as you solve task, consider colleagues’ and student ideas

Make Tacit Ideas Explicit; Confront Different Ideas, Negotiate with Colleagues

Take Risks You Would Not Take on Your Own

Reflect on Own Practice, Beliefs

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Study

Plan

Teach

Reflect

Catherine
'In the United States, Lesson Study was found to be one of the two interventions, out of the many hundreds systematically reviewed, to have statistically significant positive effects on the pupils’ fraction knowledge in grades 2, 3 and 5 (Gersten et al. 2014).’

Cajkler et al (2014) argue that Lesson Study provides four benefits:

- Greater teacher collaboration
- sharper focus among teachers on students’ learning
- development of teacher knowledge, practice and professionalism
- improved quality of classroom teaching and pupil learning outcomes. (Coe et al, 2014: 49)
Systematic review (Cheung & Wong, 2014)

Reviewed 9 articles, reduced from 74 (publd 2000-2010)

Narrow focus:

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<th>No. of lesson studies with significant positive effect on students</th>
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Table II. Summary of positive effect of Learning Study and Lesson Study

Positive evidence of educational benefits but lack of high quality and well-controlled studies.
EEF evaluation

RCT of 181 schools (12,747 pupils) in the South West, East Midlands, and North West.

- No evidence that this version of lesson study improves maths and reading attainment at KS2.
- Evidence that some control schools implemented similar approaches to LS, which may underestimate impact of LS.
- Teachers felt LS was useful professional development.
Critiques

Lesson study is a professional learning process, not an intervention. Impossible to isolate its effect from the pedagogical content (talk for learning).

Control group contamination and failure to take lesson study’s adaptability into account.

‘Lesson study as used in Japan is established in a whole-school environment of practitioner inquiry and research’ (Seleznyov, 2017)
Lesson study for Maths

Two smaller-scale RCTs involving mathematical resource kits and fraction knowledge

‘Low-touch’ and self-managed: ‘the intervention supported educators’ own agency and leadership, while also allowing them to build their mathematical knowledge’ (Lewis & Perry, 2015: 153).

Results suggest that integrating research-based resources into lesson study offers a new approach to the problem of “scale-up” by combining the strengths of teacher leadership and research-based knowledge (Lewis & Perry, 2017).
If lesson study works, why?

- Gradual process focused on learners’ specific needs, seen with fresh eyes.
- Includes collaborative enquiry/experiment
- Supportive teaching and learning community
- Access to external expertise (Dudley, 2014)
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Focus on Years 5 & 6 with objective of ‘training lead teachers to use the Lesson Study coaching cycle in order to help teachers increase the rate of progress of particular children’.

Research was to assess:
• short-term impact of the programme on pupil attainment
• medium-term impact on local systems' capacity to support collaborative professional learning

Why is lesson study being used and how does it vary?
LT programme

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Outline evaluative logic model

The Lead Teachers programme and associated Lesson Study model → Local Authority Reconstruction of the Programme → Reconstruction of the Programme in schools → Nature of the Collaborative Professional Learning Provided → Changes to Classroom Practice

Short term impact on pupil test scores

Outcomes on individual practitioners, schools and the local system
Methodology

Multiple site case study in 3 LAs focusing on programme enactment and impacts

• Semi-structured interviews with 7 LA Officers; 21 headteachers; 12 lead teachers; 10 supported teachers in 3 LAs.

• Document analysis of programme materials, national and local performance data and local evaluations.
Impact on pupil outcomes 2009-10

Level 4:
Results improved for LT schools in English, Maths and English & Maths combined and narrowed gap with non-LT schools, with biggest increase in Maths.

Level 5:
Results improved for LT schools in all three areas, gap narrowed only in Maths.

Similar pattern in the 3 case study LAs, esp in first year of involvement.

Fig. 3. Differences between results in English at Level 5 between 2009 and 2010 comparing LT schools (x) and non-LT schools (y).
Impacts on professional learning

Recognition of benefits, especially among lead teachers, but associated more with developing their professional networks than extensive school to school networking.

Headteachers’ commitment to lesson study depended on their access to support structures for collaboration.
Impacts and contexts

Impacts difficult to assess as lesson study is ‘an umbrella term for a variety of adaptations’ (White & Lim, 2008), hugely variable in how it is reinterpreted (Xu & Pedder, 2009).

Impact assessed at three contextual levels:
- National/local system (macro)
- School (meso)
- Lesson study process (micro)
Key contextual factors

System: position in LA’s school improvement strategy; history of school to school working; natural of local school improvement challenges.

School: Capacity to view lesson study as longer term opportunity for professional learning; structures and purposes.

Lesson study: Relationships – professional autonomy, dialogue and disposition.
Challenges

- Need to ensure consistent approach to observation.
- Discussions during reflection should focus on student behaviours, rather than teaching process. (Saito et al, 2008)
- Importance of ‘matching’ teachers carefully and clarifying roles (Hadfield et al, 2011)
- School leaders have to be sensitive to the time needed to deliver collaborative enquiry effectively.
- ‘Slack’ needs to be built into projects so that they can adapt to the rhythm of the teaching year.
Implications

• Accountability pressures (at different levels) restrict opportunities for lesson study to lead to deep professional learning.

• Impact related to ability of teachers to develop relationships characterised by autonomy, dialogue and openness.

• Need to focus on effects sought and achieved at different system levels, rather than characteristics of lesson study, and recognise that its impact arises from interaction of various effects or outcomes in and across the different levels of a system – space to theorise, experiment with practice and develop observable outcomes.

• Need to consider contextual factors, at different levels within a system, which support the development and sustainability of lesson study.
Where next with lesson study?

• Counter magic bullet myths – lesson study is neither a panacea, nor discredited.
• Revisit Japanese origins – extended, whole-school application based on collaboration and research.
• Rather than viewing it as an intervention, we need a school-based networked approach to consider role of content and processes in lesson study over time.
• Evaluate its interactive effects over time: a lesson study of lesson study?


