

Lesson study: Lost in translation?

The Japanese concept of lesson study is experiencing a significant boost in popularity in the UK. But what is lesson study exactly, and how does the approach translate to the British classroom? In the first of two articles, the IOE's **Sarah Seleznyov** gives a useful guide.

esson study is a collaborative approach to professional development that originated in Japan. Since 1999, when Stigler and Hiebert first wrote about lesson study as a model for improvement of classroom practice in the US¹, lesson study has enjoyed an enduring fascination for teachers around the world.

Lewis, Perry and Murata describe the emergence of lesson study in the US as a 'local proof route': practitioners have adapted and spread the approach in the absence of funding, direction or research findings because they perceive it to be valuable. In the last ten years, lesson study has begun to gain momentum in England through a similar route. However, the London Centre for Leadership in Learning (LCLL) have supported more than 50 schools to explore lesson study over the last four years. This has been part of their broader work with schools in supporting a research approach to professional learning and leadership.

But what is lesson study? What is it *not*? And what are the steps forward for any school leader wanting to implement the approach?

What is lesson study?

At its simplest, we can describe lesson study as a joint practice development approach to teacher professional learning in which teachers collaboratively plan a lesson, observe it being taught and then discuss what they have learnt about teaching and learning. However, the critical features of its process are less simple to identify and frequently contested in the literature.

Based on our analysis of the literature, and drawing largely on a model developed by Lewis³, we attempted to identify the critical components of the lesson study process:

Critical features of a school-based lesson study project

1. Identify focus

Teachers compare long-term goals for student learning and development to students' current learning characteristics in order to identify a school-wide research theme.

2. Planning

Teachers work in collaborative groups to carry out *kyozai kenkyu* (study of material relevant to the research theme). This study leads to the production of a collaboratively written plan for a research lesson. This detailed plan attempts to anticipate pupil responses, misconceptions and successes for the lesson.

3. Research lesson

The research lesson is taught by one teacher who is a member of the collaborative planning group. Other members of the group act as silent observers, collecting evidence of pupil learning.

4. Post-lesson discussion

The collaborative group meets to discuss the evidence gathered. Their learning in relation to the research theme is identified and recorded. It is intended that this learning informs subsequent cycles of research.

5. Repeated cycles of research

Subsequent research lessons are planned and taught, drawing on the findings from post-lesson discussions.

6. Mobilising knowledge

Opportunities should be created for teachers working in one lesson study group to access and use the knowledge from other groups, either through observing other groups' research lessons or through the publication of group findings.

7. Outside expertise

Where possible, there should be input from a *kochi* or 'outside expert' involved in the planning process and/or the research lesson.

What does lesson study look like in practice?

In our experiences of working with UK schools, a practical application of the LCLL lesson study model looks something like this:

Establishing the collaborative group

Teachers are placed into groups of around three or four. Sometimes these groups are created according to year group, phase or department; sometimes they are cross-phase or cross-subject. Both have advantages in terms of professional learning.

In homogenous groups, there is often a shared language and understanding of the research theme, and new learning is more easily incorporated into shared curricula and policies. The timetables of such groups are often similar, making it easier to find shared time to allocate towards lesson study.

More disparate groups enable the asking of naïve questions that challenge teachers' thinking: 'Yes, why have I always done it like that?'. They also help teachers to gain a wider appreciation of the learning needs of different achievement groups and

Professional Development

see that, often, similar problems are faced by teachers in different phases and subject areas, and there might be common pedagogical solutions.

Identifying a focus

The school identifies a priority from the school development plan, which they feel would be beneficial to focus on. This becomes the school's research theme and is often identified in consultation with teachers. This theme may be developed for a year or more.

Planning

Based on the overarching research theme, groups of teachers consider what they want learning to look like, using a tool we have developed called an impact framework, which is based on the work of Earley and Porritt.⁴ The impact framework asks teachers to consider what learning will look like in a year's time if the desired change is successfully made to teaching and learning (the impact), and, specifically, what teachers and pupils will be saying, doing, hearing and feeling.

The impact framework then asks teachers to consider what learning currently looks like, in comparison to the desired situation (the baseline). Based on this comparison of baseline and impact, a research question is developed that will guide the lesson study process for the group. The research question should be tight enough to guide the research but loose enough to allow for unexpected outcomes. Teachers often find this stage of the process difficult. Support from the LCLL consultant enables them to tighten their research question and align it with the baseline-impact statements in their impact framework. The LCLL consultant will then identify some key research or good practice evidence that relates to the groups' research questions for *kyozai kenkyu*. Teachers will share this research and discuss which of the findings are relevant to their context and might be worth exploring in the research lesson. They will agree which member of the group will be the first focus teacher who will teach the first research lesson.

There is then a morning or afternoon out of class or three hours of professional learning time allocated to the planning of the research lesson. The UCL Institute of Education Lesson Study Handbook provides a standard template for this that encourages teachers to link the lesson plan to the impact framework, the research question and the lessons drawn from *kyozai kenkyu*. The lesson plan is written with a small group of focus pupils in mind (maximum of six).

Key to planning is the writing of a script-like description of the lesson that includes expected pupil responses (both successful and unsuccessful). This is not a script to be adhered to in the research lesson, but an attempt to consider and to have planned for the various possible outcomes for pupils in order that the teacher may focus on an exploration of the research question, rather than in firefighting in response to unexpected pupil responses and confusions.

At the end of the lesson plan, three questions for observers are planned so that it is clear what the focus of the observational data gathered should be. Sometimes teachers who are not teaching the research lesson agree to try the lesson out beforehand to test its assumptions and to feedback any relevant information to the group before the date of the research lesson.

Research lesson

On the day of the research lesson, the teacher group meets to review the lesson plan. A seating plan is shared and each teacher is given one or two focus children to observe. Any important contextual information is shared (for example, recent issues that may affect the class dynamic). During the research lesson, the observers attempt to remain as unobtrusive as possible. They do not interact with each other and avoid interacting with the pupils as much as possible, often by deflecting any attempt at interaction by saying 'Go and ask your teacher about that'. Unless the lesson involves considerable movement by pupils (for example, in a free flow early years setting), observers remain static for the majority of the lesson. They gather as much observational detail as they can about the focus pupils, including times, actual words, actions and feelings as observed.

Post-lesson discussion

If at all possible, teachers meet immediately after the lesson to discuss their findings. There is a formal chair for this discussion and, ideally, this is not the teacher of the

lesson nor someone who was observing a focus pupil. The chair follows a set of strict protocols, (which are included in the UCL Institute of Education Lesson Study Handbook) that aim to ensure a tight focus on the research question and to avoid judgemental language: we are exploring learning and not teaching.

During the first part of the discussion, each observer shares the evidence they have gathered in turn, only being interrupted with requests for clarification or further detail. The teacher who taught the lesson speaks last. Once each set of observational data has been shared, the chair suggests two to three themes for further discussion that seem to have emerged in common across the different sets of data. These themes form the basis for the second part of the discussion. Finally, as the conversation draws to a close, the chair suggests which of the ideas from the discussion it might be useful to explore in the next research lesson.

Knowledge mobilisation

This cycle of planning, research lesson and post-lesson discussion is repeated until each teacher in the group has had the opportunity to teach a research lesson. Teachers often refer back to the LCLL impact frameworks to see if they have achieved the impact they planned for. At this point, some findings are usually agreed upon that would be useful to share with a broader group of staff, or as an event for all staff in the school. A plan is developed to achieve this 'knowledge mobilisation'. Many schools have allocated professional learning time to the sharing of findings. Others have planned open house' research lessons to showcase findings, where teachers beyond the planning group for the lesson are able to observe and participate in the post-lesson discussion.

Case study: Tottenhall Infant School

Tottenhall is a multicultural three-form entry infant school in North London. They were keen to take on lesson study as their main approach to professional learning. In order to facilitate this, they redeployed the majority of their afterschool staff meeting time to enable teachers to write their LCLL impact frameworks, agree their research questions, carry out kyozai kenkyu, plan research lessons and have post-lesson discussions. This meant that the only



release time the school had to provide during the day was for teachers to observe research lessons, and this was covered by using teaching assistants within the school. Lesson study has been a cost-effective and high impact professional learning approach for all staff.

When is lesson study not lesson study?

Chokshi and Fernandez state that 'Lesson study is easy to learn, but difficult to master.'6 They identify the fact that schools do not have a deep knowledge of lesson study, potentially leading them to 'focus on structural aspects of the process...or...mimic its superficial features, while ignoring the underlying rationale for them.' So how can schools ensure that their models of lesson study remain true to the spirit of the approach and do not lose their power in the process of 'creative transformation'?

When carrying out an extensive literature review to explore the impact of lesson study on teacher and pupil learning, we came across many studies that seemed to have

made so many adaptations to the approach that they lost its essence. In our view, the below adaptations of lesson study move so far away from the Japanese model that they risk not being lesson study at all.

'It's enough for teachers to simply talk about teaching.'

Several lesson study models focus on teacher talk in the lesson study process as the key vehicle for learning. In our view, it is the engagement with research knowledge in combination with teacher collaboration that makes lesson study so powerful. Without reference to what is known about the research theme beyond the school, teachers may be simply 'reinventing the wheel', possibly to a lower design specification. *Kyozai kenkyu* is highlighted in much of the Japanese literature on lesson study as a vital part of the process. *Kyozai kenkyu* prevents 'groupthink'⁸, whereby the research group fails to consider viable and more effective alternative teaching and learning strategies, preferring to operate within its own (possibly ineffective) comfort zone.

'We can use video instead of live observation.'

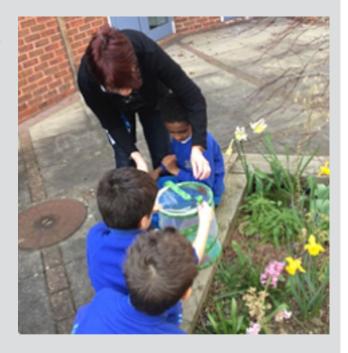
Despite the fact that there is no evidence of video being used in Japanese lesson study, several research studies have replaced the live lesson observation with video recording for reasons of expedience and cost. This is obviously a tempting option for schools who are struggling to cover the costs for release time for teachers to participate in lesson study.

In our opinion, however, video is a poor substitute for live lesson observation. If there is only one camera, it is very likely to be focused on the teacher, shifting the observers' focus to the teaching and not the learning. Even the most recent developments in video technology cannot capture the full 3D effect of sitting in a lesson—there are only so many angles from which the camera can film. A live observation, where you sit near the focus pupil, enables you to gain a sense of the pupils' emotional reactions to the lesson, as well as their verbal responses and physical actions. You are often able to capture the quieter communication between pupils, which can be much more informative than the louder communication in whole-class discussion.

Having said this, there are occasions where the judicious use of video can expand access to lesson study, without compromising on the benefits of a live lesson observation.

Case study: Russet House Special School

This special school in Enfield caters for nursery and primary-aged pupils with autism. Classes are very small, often with only six to eight pupils, and up to four adults in the room. It would therefore be difficult to have several additional observers in the room for a research lesson. However, the school wanted to involve as many teachers as possible in the lesson study process. They decided that in each research lesson, two observers would be present and that the lesson would be videoed. After school, a larger group of observers watch the video recording and then the post-lesson discussion continues as normal, led by the observers who were present in the research lesson. This has enabled dissemination of learning from the lesson study process to a broader group of staff without disrupting learning for pupils.



'We are developing the perfect lesson.'

In terms of revising or re-teaching the research lesson, the literature diverges. Some sources claim that revising and re-teaching the lesson to a different class is a standard part of the process, others declare it as optional, and still others declare it is not part of the process. Professor Fuji from Tokyo Gakugei University sees the re-teaching of the lesson as unethical. In his opinion, a research lesson is designed with a particular class at a particular moment in the learning process in mind. To teach the same lesson to another class with a different set of pre-learning experiences would work against the learning needs of these pupils.

This links to a focus in lesson study literature on process, not product. Chokshi and Fernandez state that lesson study is about 'intellectual process' rather than 'isolated products'9. In our opinion, perfecting one lesson should not be the focus of a lesson study process. Lesson study should focus instead on gradual, incremental changes to teachers' practice that will enable improved learning for all pupils over time.

'We don't need to look outside our own school.'

Several studies note the role of the 'outside expert' (kochi) in the lesson study process. Murata describes how the kochi observes the lesson, pulls together the ideas shared in the discussion and ties what is explored to larger subject-matter and pedagogical issues. The kochi's role is to ensure that teachers build on the work of other lesson study groups, acting as a 'bridge between the various lesson study groups that he or she works with or knows about'. Japanese lesson study groups operate within networks that can share findings and pool professional knowledge via the kochi. It has been argued that the need to source and develop such experts in the US and UK is crucial to the success of lesson study, but that the associated cost to schools makes this problematic.

In addition, teachers' unfamiliarity with research was found to be problematic in the US. There, many teachers found it difficult to develop a research hypothesis, to design an appropriate classroom experiment to test the hypothesis, to gather and use appropriate evidence, and to generalise the findings. In our projects, we have been able to support teachers through this process to develop a research skill-set and understanding that goes beyond lesson study. This is important as it enables teachers to become 'proponents of evidence-informed expert judgment rather than evidence-based, top-down instruction.'12

In our model of lesson study, the *kochi* plays a key role in shaping any impact analysis, linking the lesson study to the broader research and good practice literature, and developing lesson study protocols to ensure deep learning for teachers. We have been able to share learning across the many lesson study networks we have supported in terms of shared knowledge about teaching and learning and the successful implementation of lesson study.

Case study: Rosendale School

This three-year project funded by the London Schools Excellence Fund sought to develop a network of schools committed to lesson study as a model for professional learning and to thereby extend and deepen teachers' understanding of what works in the classroom. Over the lifetime of the project, 27 schools have worked together with LCLL experts to develop a group of lead teachers or *kochis* who can offer expertise to all schools in the network. Lead teachers source material for *kyozai kenkyu*, visit other schools to lead lesson study, and periodically facilitate 'open house' research lessons which visitors from participating schools can attend. The project has built capacity for a continuation of lesson study beyond the duration of the funding and built a team of *kochis* who are committed to sustaining the project both within their schools and across the network.

'We'll all help you plan your lesson and then give you feedback.'

The accountability and performance management framework in England has created what Chris Watkins has depicted as a tension between lesson observation as a tool to improve learning and as a means of proving one's performance (see figure 1).¹³



Figure 1: Tension between learning and performance

Teachers being observed as part of standard performance management lesson observations do not want to take risks with their practice. The stakes are too high. And yet, it is only by taking risks that they are likely to improve their practice. One of the most beneficial aspects of lesson study that is reported by schools is that it encourages teachers to take risks with their practice by making the lesson a shared product. The lesson is 'ours' not 'yours' and therefore we all take responsibility for its successes and failures.

Some schools have tried to short-circuit the need for release time for teachers, by providing them with time out of class to discuss the lesson plan, but then expecting the teacher whose class will be taught to produce the written plan. This has two undesirable outcomes. Firstly, the value of the planning process lies largely in the co-production of the 'script', as described above. It is in the writing of the 'script' that teachers report their most significant learning and in which the shared ownership of the lesson is forged. Secondly, as the lesson plan has now been written by the person who will teach the lesson, it essentially 'belongs' to them and is therefore much closer to a performance management lesson observation. In post-lesson discussions, teachers therefore find it difficult not to slip into the 'what went well, even better if' language frame for lesson observation feedback, as the lesson is a demonstration of the individual teacher's skill and not the group's shared understanding of pupil learning.

Questions to consider when getting started with lesson study

The following questions may help you in planning to introduce lesson study in your own school or alliance:

- 1. What could our whole-school research theme be? How can I enable teachers to be actively involved in the selection of this theme?
- 2. How can we enable teachers to gain access to research and good practice material of relevance to their own research questions?
- 3. What professional learning time is available to us, and how could it be redeployed to accommodate lesson study?
- 4. Is there outside expertise we could draw on from our local authority, network or alliance of schools, or local university?
- 5. What's the best way to ensure complete separation between lesson study and performance management lesson observation?

In my next article...

I will explore the most effective ways to capture the impact of your lesson study project. I will also look at maximising the learning from your project, so that improvements to teaching and learning take place beyond the research group, and benefit all staff and pupils.

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To find out about the UCL's lesson study leadership programmes, visit: ucl.ac.uk/lifelearning/courses/leading-lesson-study-across-schools. For access to the IOE online journal libraries (and a wealth of other useful resources), join the UCL Institute of Education Research and Development Network: ioe-rdnetwork.com.

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56

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Knowledge trails

- Lesson study: Towards collaboration David Weston explains how lesson study is helping schools move towards more teacher-led professional development.
 library.teachingtimes.com/articles/lesson-study-towards-collaborative-cpd
- 2. Observing classrooms: A powerful shift in emphasis How can we enhance the learning going on in our classrooms? Alison Peacock explains why so many schools across the UK are turning to lesson study to answer this fundamental question.
 library.teachingtimes.com/articles/observing-classrooms

How can your school benefit from lesson study?

Find out in Sarah's upcoming webinar



Lesson study is experiencing a significant boost in popularity in the UK. However, the lack of English-language literature means it's difficult to know whether we are really applying it to its full potential.

Join Sarah Seleznyov on **Thursday 20 October from 16.00-17.30**, as she explores the key elements of lesson study, and considers how it can be adapted to work in the English school setting while retaining all that made it so successful in Japan.

Places are limited, so book now to avoid disappointment!

Book your place today!