Network leadership in action:

Getting started with Networked Research Lesson Study

“Classrooms are busy places. Networked Research Lesson Study helps slow lessons down. You can see much more. You can improve, innovate and transfer practice more effectively.”
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Pete Dudley
Lead developer
Networked Research Lesson Study

Classrooms are busy places. Teachers make up to 30 per cent more decisions in their lives than other professionals. Alone in their classroom, a teacher may see only five per cent of pupil interactions. Networked Research Lesson Study (RLS) helps slow lessons down. You can see much more. You can improve, innovate and transfer practice more effectively.

The RLS process encourages risk-taking in a culture of professional learning both from what does not work, as well as what does – ‘failing forwards towards success’ as Edison expressed it.

Schools and networks of schools involved in the project are now building RLS into their school improvement strategies, network development plans and their models of continuing professional development.

The process is being found to be useful for transferring practices across subject areas in ways previously not encountered or envisaged by participants. It may, thus, have potential significance in reducing within-school variation.

There is evidence of some significant impact on pupil progress and outcomes.

The process is viewed positively as a mechanism which lends itself to cross-school and cross-phase working particularly as a result of the fact that the unit of study and delivery is a ‘lesson’.

The process has been found to help teachers – experienced and less experienced – to “see things differently” (project member), to be able to critically view their own practices without being blinded by familiarity or “blinkered by… assumptions about [their] immediate settings”. (Desforges, 2004)

In all cases, teachers are finding that the value of the Research Lesson Study is significantly increased if pupils are involved in the process.

Teachers in their first three years of teaching have found the process has given them an opportunity to engage in ‘deep’ professional learning, not offered by existing models such as the standard diet of the induction year.

The process is providing a useful means of addressing common questions and problems encountered by teachers in pedagogic fields of metacognition found within Assessment for Learning, Dialogic Learning and Thinking Skills. Schools are putting these into practice across the curriculum as a result of the Key Stage 3 and Primary National Strategies.

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Networked Research Lesson Study

This development tool brings together, in a very practical way, the findings of the NCSL-CfBT Research Lesson Study project. It aims to provide network and school leaders with all they need to get started with research lessons. This booklet sets out the rationale and the process. The second booklet presents thumbnail snapshots of practice and the third contains proformas for planning, observation and analysis. The development tool is accompanied by a DVD – for details see page 11.

What is Networked Research Lesson Study?

Networked Research Lesson Study is a process which helps groups of teachers from schools in a network to develop lessons and innovate new practices in order to solve classroom problems and raise standards of teaching, learning and achievement.

Research lessons provide a framework for the collaborative study of the basic unit of teaching and learning – the lesson. This framework engineers the way the lesson is seen and the way it is talked about. The engineering enables teachers to:

- Take risks together that they might not otherwise have taken alone.
- See things they could not otherwise have seen.
- Capture insights through multiple perspectives.
- Identify and value what does and does not work.
- Develop new practices which take account of this knowledge.
- Share new practices with colleagues.

The framework is based on a familiar enquiry design but with some important modifications: case pupils, joint ownership, shared risk and communicated outcomes.

A group of teachers who know what aspects teaching they need to improve collaboratively – plan, teach, observe and analyse a series of lessons. They record, even video, key moments and sequences as they refine the process. They create an artefact – a video presentation, a demonstration lesson, a resource – to take the new practice to other teachers. All their discussion and analysis starts from how the case pupils and their groups responded and learned at each stage, compared with what was planned and expected.

Origins of Networked Research Lesson Study

The origins of Networked Research Lesson Study are in "jukyoukenkyuu" – Japanese ‘lesson study’ which began to interest educators in the United States of America eight years ago. In Japan, teams of teachers traditionally identify an aspect of their teaching which is likely to have an impact on an area of need in pupil learning. They spend between one and three years working in groups planning interventions which might work, closely observing these ‘research lessons’, deconstructing and writing up what they learn – from failures as well as successes.

At the end of a cycle of studies, they may teach a public research lesson before an audience of peers from local schools and colleges in order to share the practice and widen the critique. It can be a city-wide event (Watanabe, 2002). These studies are widely read by Japanese teachers who contribute more than 50 per cent of the educational research literature produced in the country. Most Japanese teachers would expect to be involved in at least one network or community of colleagues working on a research lesson question, at any one time in their career.

Lesson study has been developed in a number of locations in the USA. It is also used in the Improving the Quality of Education for All (IQEA) and Networked Learning Communities programmes in England. The model developed by the NCSL-CfBT Networked Research Lesson Study project is unique in its use of ‘case pupils’. These are learners who represent a particular group profile within the class ie higher, middle or lower attaining in the subject being taught. They are kept constantly in mind when jointly planning, observing and analysing the lesson – and what they did or did not do, or learn, is the basis of all lines of questioning.

In the NCSL-CfBT project, teachers noted a dramatic rise in both student learning and test results as a consequence of their involvement.
Why do research lessons in networks?

Networked learning can be described as occurring when people from different schools engage with one another to learn, innovate and enquire into their collective practices. This can happen via:

- joint work groups
- collective planning
- mutual problem-solving teams
- collaborative enquiry groups
- shared professional development activities

NCSL, 2005

Doing Networked Research Lesson Study is one way to engage in these activities and to practise enquiry-based, shared leadership. It is also a way of acting on your commitment to collaborative enquiry, enquiry-based practice and to evidence and data-driven learning. In addition, much of our own classroom and school is invisible to us, we are too familiar with our settings. Much of what we know is "embedded in the taken-for-granted social constructions of particular classrooms or schools" (Desforges, 2004).

Teacher practice-knowledge is built up over years. Two teachers who both have expertise in a certain subject or field may still have much to learn from each other. Bringing multiple perspectives from a network of schools to bear upon an issue can bring hundreds of years of teaching experience into the room.

Networked Research Lesson Study is a powerful model of collaborative, classroom-based teacher enquiry between schools. It improves teaching and shares practice-knowledge across schools through lesson development. So Networked Research Lesson Study is a powerful leadership tool for any network leader.

Historically, practice-knowledge has tended to stick with teachers in their classrooms. Teachers have not had ways of making this knowledge explicit to themselves let alone others. Michael Fielding and colleagues (2003) argue that such ‘sticky knowledge’ is best moved from classroom-to-classroom by joint development work.

David Hargreaves (2004) urges school leaders to create opportunities for teachers to value risk-taking and to work across schools in each other’s classrooms where they are not blinkered by assumptions about their immediate settings. Networked Research Lessons have been shown to harness risk-taking to produce what Hargreaves describes as “disciplined innovation” geared towards tackling aspects of practice in need of development and leading to significant school and network development, so that failures are outweighed by subsequent improvements.

School leaders are finding that involving teachers from more than one school in a research lesson sharpens their practice, their vision and makes them more accountable to accuracy and learning:

“We had to explain what we were doing, why and what we wanted to get out of it. A colleague from a network school asked us questions at certain points where you thought ‘I don’t really know, we’re not very clear about that element of it’. That made us think ‘what do we really need to sharpen up here before we put it into practice?’”

Assistant headteacher

Our shared tacit knowledge of one context causes us to be blinded to practices by our familiarity. In short, sometimes we don’t know what we know, or, don’t know. And it takes someone unfamiliar with our context to help us see it.

Getting the right focus for your Research Lesson Study

One of the great things about developing lessons using RLS is that the research question guiding the process always comes from the same root. Because you know what the practice is that you want to improve, your question can always be written:

**How can we improve the way we teach ‘X’**

X might be ‘...dialogic group talk for solving complex statistical problems’ or it might be ‘...students to use differentiated investigation success criteria to help them plan and conduct an effective ratio investigation’.

Analyse your data first to make sure you have the right focus

Analyse your network schools’ performance data, value-added figures and self-evaluation data in order to be sure that the area you want to focus on developing is an area of real need. Perceived needs – like ‘boys’ writing’ are not always the real issue when you look at real data sources and triangulate against pupils’ work.

If you were to conduct a research lesson tomorrow – what would your question be?

See Identifying a network focus (NCSL, 2005a), and Sharpening your network’s pupil learning focus (NCSL, 2003) for guidance.
Quick start guide

Getting started with Networked Research Lesson Study

Identify the group of teachers who will start off the lesson study in your school or network. They need to be confident enough to thrive on things going wrong as well as right, and to reflect new practices. It is best to carry out one or two pilot research lessons to familiarise yourselves with their distinctive core components. These components are described in the following step-by-step guide.

Step 1 Research Lesson Study core components
- Ground rules for working in joint research mode.
- Use of case pupils.
- Identification of what you want to learn and why – your research or enquiry focus.
- Connecting with and drawing on what is already known about your focus so you don’t end up reinventing the wheel.
- Joint lesson planning.
- Joint observation and deconstruction.
- Analysis and recording of what has been learned by case pupils and by researchers.

Pilot these seven components before you add the following three:
- Capturing practice/data (eg using video, stills or audio).
- Identifying clearly and agreeing exactly what you have learned – innovated, refined or modified.
- Creating an artefact to convey this (eg a PowerPoint, a video, a coaching guide) and using it for real.

The design template on page 10 has been developed over a ten-year period and draws on the experience and wisdom of practising teachers as well as regularly updated research findings. The steps listed represent the core essentials of research lessons. If these are followed over a sequence of research lessons you will be engaging in the practice of Networked Research Lesson Study.

Step 2 How to make Research Lesson Study work successfully

- Make it whole school and whole network
Research Lesson Study has worked most successfully when the process is supported at whole school level across a school – or better still, across a network of schools with a common pupil learning focus. It needs to be part of the school or network development or improvement plan.

- Insulate the Research Lesson Study process from other classroom observation activity. RLS is not performance management or monitoring.

“Focusing down on case pupils enabled a number of really important things to be revealed”

- Take steps also to distinguish between RLS and mentoring and coaching arrangements in place in the school. Practices innovated through RLS may feature in subsequent specialist coaching or other transfer – but RLS is not a coaching process. It is for innovation, capture and transfer of practice.

- Agree a whole school question or theme related to your pupil learning focus (eg literacy, application of mathematics, Assessment for Learning, creativity etc) and then generate RLS team questions from this.

- Allow enough time for the process – as a network, think of a cycle of at least one year working on common problems. Build in update sessions to share work in progress with staff – maybe also local advisers or specialists.

“Our experience of observation has been too open-ended and generic. With RLS we’re trying to look at the lesson through a filter”

“It enabled me to see things differently”

“Focusing down on case pupils enabled a number of really important things to be revealed”
Always over-estimate the amount of time allocated to deconstruction and analysis. And make sure you keep a record.

Do not be put off by the problems you will initially experience using the video.

Talk about your research lessons in the staff room positively and create more interest.

Work hard to establish real clarity about what you have improved in pupils’ learning through your new teaching technique. When you’re sure you know and can describe it – do so. Tell the story of your Research Lesson Study – what it was you were trying to address and improve. Get staff meeting time to tell the story. Make a presentation. Illustrate it with video clip examples. Make a leaflet or newsletter and circulate it.

Work with colleagues afterwards in their classrooms to model and coach the technique – or to help them adapt it to their context, subject or pupils.

Step 3 How to lead Research Lesson Study successfully in a network

- Make sure your lesson study focus supports the network’s learning focus.
- Make sure you have a nucleus of energetic members who are committed to improving practice and not afraid to take risks and fail, plus the committed support of the leadership of the school and network to allow at least three terms to establish the work.
- Make sure this nucleus contains a decision-making leader or influencers – but also people at different stages of their career development. Link people with a common learning purpose.
- Keep communicating successes and what’s been learned from failures, both outwardly across the school and network, but also vertically – from senior leadership, through middle leadership to emergent leaders, class teachers, Learning Support Assistants and Newly Qualified Teachers. Keep it on the network’s agenda.
- Remember – the project found that practice spread after a year to include much more seasoned staff.

“What’s very powerful is that people felt that because they’d planned together, it made it okay if it went wrong…”

“We found the change started when people began talking in the staffroom very, very positively – having started by developing their own confidence…”

“More important... to develop the learning from the first lesson. That was very powerful for them to work out how we can take it into departmental meetings”
# The Research Lesson process

## Step-by-step approach to getting started with Networked Research Lesson Study

1. **Analyse your data and identify your focus.**

   What subject are you trying to improve – does your network’s data reveal this? Are you using a tried and tested pedagogy such as Assessment for Learning, Dialogic Learning or Thinking Skills – or going it alone?

   Research focus will always look something like: ‘We want to learn how to improve the way we teach .. X .. to ..Y’.

2. **Identify your lesson study group – two, three or more people with dedicated time and support.**

   - Set ground rules for assessed risk-taking and joint ownership of the research lessons, where it is expected that learning is from what goes wrong as well as right.

   Threes work well. More can work very well, but costs increase. Twos can also work successfully, but there are fewer perspectives brought to bear. It helps if there is some reason for you to work together – for instance you share common responsibility for a year group, or a scheme of work. Perhaps you have identified a reason to find out about each others’ practice – can some of the motivating techniques used in music or art be adapted and applied in science or mathematics? Work in role as researchers. Agree that ‘failing intelligently towards success’ is the ethos. Agree that all aspects of the research lesson and the study are the joint responsibility of the researchers. People are more likely to risk things going wrong if they share the risk. Carve out safe areas where RLS activity can be insulated from high stakes monitoring or performance management activity.

3. **Connect with, and draw on, what is already known about your focus before you start your work.**

   It is easy to draw misconclusions from small-scale studies. For example, a group concluded that because collaborative group work can be demanding for pupils, and so can be less popular than non-collaborative options, it is not an appropriate teaching form. There is a weight of evidence to the contrary, and lots of help in how to answer the question they had really arrived at, which was ‘How can we improve the achievement of our pupils in subject ’X’ through the use of collaborative group work?’ A search for key texts on collaborative group work and talk in learning can get you started. The RLS website suggests many (see page 11 for details).

4. **Identify three case pupils (or multiples of three when you are experienced in Research Lessons Study).**

   Case pupils should be chosen because they represent three groups of learners in the class who present different profiles of need in relation to the lesson objectives – they may be operating at different levels of attainment in the subject area, they may represent pupils with varying social needs, motivational needs, or linguistic needs. Write an explicit sentence about the needs they have been chosen to represent. Checking out via a pre-research lesson conversation, interview or assessment can be invaluable in relation to your research lesson design.

   Write explicitly what you want each pupil to learn in the research lesson(s) ie to be able to do, understand or use as a result of the learning.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td><strong>Jointly plan a research lesson based on the needs of the case pupils.</strong></td>
</tr>
</tbody>
</table>
|      | Draw together:  
|      | - What you want to learn or improve in the teaching and learning.  
|      | - What the pupils need to learn in the curriculum.  
|      | - The case pupil profiles.  
|      | - Your RLS focus question.  
|      | - Plan each step of the lesson – keep thinking alternately about the case pupils and the whole class.  
|      | - Write the sequence of the lesson on a planning template (see Booklet 3 *Networked Research Lesson Study tools and templates* for further details). |
| 6    | **Joint observation and data capture.**  
|      | - Think about and agree key points you want to gather data on. Record this.  
|      | - Think about and plan who will be doing what, when. Write this down.  
|      | - How frequently will you pay attention to the case pupils and their groups?  
|      | - What questions do you plan to ask? Write these down.  
|      | - Use the research lesson plan and annotator for making notes to ensure fidelity to your plan (see Booklet 3 *Networked Research Lesson Study* for further details).  
|      | - If you are using video, which sections of the lesson do you need to plan to capture? Make them short.  
|      | - Will you be using any pre- or post research lesson data questionnaires or interviewing of the case pupils?  
|      | - When you start to use video, read the advice from all those who have failed forward intelligently, and learned on your behalf. |
| 7    | **Joint analysis and recording. Being explicit about what you have learned.**  
|      | Explicitly agree and record on the **Record of Agreed Learning Outcomes** (Booklet 3):  
|      | - What each pupil learned (in relation to what you hoped they would learn) and how you account for any differences.  
|      | - What each of you believes you have learned.  
|      | - What new practice or hunch you want to take forward to the next research lesson.  
|      | - At the end of a sequence of research lessons – what new practice you have created (i.e., what you are going to do differently from now on) and what difference it has made. |
| 8    | **Finding ways of helping others learn from what you have learned – innovated, refined or modified.**  
|      | By planning to share learning and coach others in the outcomes of the study, you are ensuring the learning doesn’t just stay with you. We have a duty to share our learning. People have found that by presenting their Networked Research Lesson Studies to colleagues, they further their own learning and deepen their understanding of what they have learned. By taking the process and modelling or coaching it with their colleagues, they further both the new knowledge about the lessons – the teaching and learning – as well as new knowledge about how to use structured classroom enquiry – the research lessons. This way we learn better how to learn how to teach (see *Using video notes* in Booklet 2 *Networked Research Lesson Study in Practice* for further details). |
1. Analyse your data and identify your focus.

2. Identify your lesson study group – two, three or more people with dedicated time and support. Set ground rules for assessed risk-taking and joint ownership of the research lessons, where it is expected that learning is from what goes wrong as well as right.

3. Connect with, and draw on what is already known about your focus before you start your work.

4. Identify three case pupils (or multiples of three when you are experienced in Research Lessons Study).

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

6. Joint observation and data capture.

7. Joint analysis and recording. Being explicit about what you have learned.

8. Finding ways of helping others learn from what you have learned – innovated, refined or modified.

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**Fig 1 Networked Research Lesson Study step-by-step**

1. Getting started with Networked Research Lesson Study
2. Teaching partner
3. Research partner
4. Teach and observe, gather data.
5. Identify and analyse need
6. Design research lesson – step by step
7. Teach and observe, gather data.
8. Analyse and record
9. When you have developed a new lesson technique over a series of lessons, help others learn from what you have learned, innovated, refined or modified by creating an artefact of practice – a presentation, video clips, demonstration lesson or a resource for the network’s teaching.

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Source: Dudley, 2003
References

National College for School Leadership, 2003, Sharpening your learning focus, NCSL, Nottingham
National College for School Leadership, 2005, Networked Learning Communities – Learning about learning networks, NCSL, Nottingham
National College for School Leadership, 2005a, 'Developing a network learning focus' in What are we learning about... Establishing a network of schools?, NCSL, Nottingham

Additional resources

National College for School Leadership, 2005, Network Research Lesson Study in practice (Booklet 2), NCSL, Nottingham
National College for School Leadership, 2005, Network Research Lesson Study tools and templates (Booklet 3), NCSL, Nottingham
National College for School Leadership, 2005, Getting started with Networked Research Lesson Study DVD, NCSL, Nottingham

To order copies of these resources please email
nlc@ncsl.org.uk

Next steps

If you would like to start a Research Lesson Study group in your network, or are interested in finding out more about Networked Research Lesson Study, visit the Research Lessons community at www.nlexchange.org.uk to download planning formats, observation and analysis guidance and examples of research lessons.