## Networked Learning Communities

learning from each other | learning with each other | learning on behalf of each other

DEVELOPMENT AND ENQUIRY PROGRAMMES

RESEARCH LESSON STUDY

# Planning, conducting and analysing research lessons: *a handbook for practitioners*

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NCSL National College for School Leadership

CfBT

T·L·R·P TEACHING & LEARNING RESEARCH PROGRAMME

E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

## Introduction

NCSL's Networked Learning Communities (NLC) programme has identified from international research, six levels of professional knowledge and learning which networks, funded by the programme, are addressing. These levels of learning are:

1. pupil learning

2. adult learning

3. school-wide learning

4. leadership learning

5. school-to-school learning

6. network-to-network learning.

In order, regularly and systematically, to bring these levels of professional knowledge to the surface and to make them explicit and workable, it is necessary to engage in some forms of systematic enquiry which enable this to happen. Preferably, this creates 'data' which can readily inform analysis at any of the levels – most importantly at this stage pupil learning and leadership learning.

The NLC Programme Enquiry revealed the importance of supporting professional enquiry in networks addressing the pupil learning focus and aligning to this the adult learning and leadership learning and enquiry work. Research Lesson Study has the potential to capture pedagogy and make it accessible and translatable across classrooms, schools and networks.

The NLC programme is supporting this process through a framework of intercompatible development and enquiry activities, including the Research Lesson Study.

**Enquiry focus**

NETWORKED LEARNING WALKS

TEACHER RESEARCHERS

RESEARCH LESSON STUDY

**Leadership focus**

COLLABORATIVE LEADERSHIP LEARNING

DEVELOPING CAPACITY FOR SUSTAINING NETWORKED LEARNING COMMUNITIES

**Pupil participation**

PUPIL INVOLVEMENT IN TEACHING AND LEARNING

TRANSFORMING LEARNING

## What is a Research Lesson?

A research lesson is a lesson which is designed by two or more professionals for the purpose of developing practice, trying out and recording the success or obstacles to success of new ideas (often ideas arising from a previous RS lesson) from two or more perspectives. Where a school or a group of schools use a series of these to study with a view to drawing more general inferences for further development across s school, learning or curriculum are or a group of pupils, this is termed 'Research study lesson'.

The National College for School Leadership, in partnership with CfBT, Professor Charles Desforges and the ESRC Teaching and Learning Research Programme (TLRP) is setting up a development and research project to explore the use of research lesson study as a tool for developing pedagogy in a sustained way in and across schools.

Research Lessons (developed in Japan and more recently in the US) take many forms. There has, however, been some development of research lesson study in the UK where the national context in which school operate has undergone sustained intervention and change over the past 15 years.

Research Lesson Study in this project will build upon recent developments in the use of classroom enquiry in England – specifically the EPSI programme (Southworth and Lincoln 1999) and research in progress within the ESRC TLRP Learning How to Learn in Classrooms Schools and Networks programme (2001).

The Research Lesson should:

1. be based in a context where a school is attempting to develop and apply best evidenced pedagogy (ie informed by high quality research findings) or take forward pedagogy in development for which there is a strong theoretical evidence base.

2. be jointly planned by one or more teachers who will be involved in teaching or observing the lesson.

3. take a small sample of three (six, nine etc) of learners who represent a range of the learners in the class/group - who become the immediate focus for planning, observation, analysis, interpretation and evaluation – their needs, responses, the progress they make, their engagement and motivation in relation to what was intended for them is the starting point of all discussion.

4. be observed by one or more of the teachers (research partners) who has jointly planned and will jointly analyse the lesson.

5. relate to the pedagogic research focus of the network but in relation to the particular context of the school, department, class etc (see point 1).

6. be jointly analysed, discussed and recorded.

7. have identified professional learning outcomes for
   - the teacher
   - the observers
   - the school and potentially the network
of which, at least the second two, are 'made public' (Stenhouse, L) to the school/ network, and which can become part of the Research Study Lesson database for the school and the network.

### What a research lesson is *not*!

In most teachers' minds, lesson observation is associated with judgement, appraisal, professional assessment or monitoring and inspection. More recently it has been associated with demonstrations and monitoring of techniques promoted by the National Literacy and Numeracy strategies. Such associations do not promote the necessary conditions for research lesson study – those where there is a trust in the fact that risks can be taken.

It is important to state here that Research Lesson is not:

- a monitoring or appraisal observation

- performance management

- part of an inspection

- demonstration lesson

- a coaching lesson where one or more individuals are in a position of greater knowledge (however coaching lessons emerge from research lesson study).

If it feeds directly into any of these processes it cannot be research lesson study.

Unlike either of these, a research lesson will not involve a monitoring or inspectorial function. The 'power' or status relationships between participants vary. Those involved will be united by the research focus. Research Lessons should not, unless requested by the teacher researcher, be used for other purposes such as monitoring, formal professional assessment etc.

A research lesson differs from a demonstration lesson. Although good practices may well emerge from a research lesson, it will be because it has been painstakingly collaboratively designed and because the teaching and learning have been studied. In time, the ideas may be taken to a point where they can be generalised into new knowledge which can be made explicit through demonstration or coaching lessons. In Japan this latter form would be termed a public research lesson where key people are invited to observe the knowledge or approaches developed in a programme of research lessons put into action. But the research study lesson and demonstration lesson serve very different purposes.

Importantly the research lesson study creates a *safe space* where informed risks are taken and where failures are as important as successes. Accountability to act upon both is equal. No-one will be criticised for trying out an idea which does not work as long as the reasons why and how a different approach may be planned are identified and acted upon.

## What is the practical and theoretical basis for using research lesson study?

When surgeons designed the places where they carry out surgery in hospitals they designed the operating *'theatre'*. Often the surgery they 'performed' was intended to be watched. This was especially true where new or experimental procedures were being shared with other surgeons (systematically spreading new professional knowledge) or the views of a range of specialists was needed in order to advise the surgeon actually performing the operation during the process.

This model of professional practice assumes a culture where:

- new knowledge is valued and spread as fast as possible

- multiple professional views and opinions are sought and seen as essential in developing practice, skills and knowledge

- there is a professional expectation and right to try out new ideas with colleagues looking on, reducing risk as far as possible in order to create opportunities to take risks and make mistakes in order to learn new approaches

- there is an infrastructure (the operating theatre itself) which enables all this to happen and allows inexperienced and new surgeons an apprenticeship based on close observation and analysis of the practice of others before venturing to try an aspect of a new procedure themselves. This is forms a structured zone of proximal development (Vygotsky, 1949).

Perhaps it is because the effects of making errors and of not advancing professional knowledge in the field of surgery are so immediate and catastrophic for patients' life chances, that professional development around sharing practice developed in this way.

The effects of not advancing professional knowledge in the field of teaching and learning are not so immediately obvious - but they are just as catastrophic in terms of peoples' later life chances. There is clear evidence that schools engaged in this kind of work develop a technical language with which to describe and talk about teaching and learning at an advanced rate. The technical language of pedagogy is poorly advanced and currently hinders technical advancement and limits the capacity of the teaching profession to develop pedagogy.

Despite being the profession which is most concerned with learning the teaching 'theatre' has never developed. The opportunities, even now for teachers to plan together, observe and teach together and analyse and discuss lessons together are rare, expensive and difficult to achieve. School buildings, timetables and classrooms mitigate against research study lessons whereas the operating theatre has been at the centre of the design of hospitals – especially teaching hospitals for hundreds of years.

## The development of Research Lesson Study

Teachers collaboratively planning a lesson which is taught and observed and then jointly evaluated is not itself a new phenomenon. Examples of such practices can be traced through many research and school improvement approaches. Specific examples are documented and exist as outcomes of the Improving the Quality of Education for All (IQEA) programme, the Essex Primary School Improvement and Research Programme of the mid 1990s and beyond, the National Oracy Project, the Language in the National Curriculum Project and PALM Project of the late 1980s and early 1990s.

In Japan however, collaborative use of the 'research lesson' has become a cornerstone of professional development and has led to sweeping changes in the classroom approaches to teaching and learning in Japanese schools (Lewis, C 2000, p5). This is now taking hold in the U.S. where the internet is being harnessed as a means for teachers to post and share examples of their own experimental and developmental teaching through organisations such as Columbia University's Lesson Study Research Group website (www.tc.columbia.edu/lessonstudy).

The approach we are to develop and research in the networked learning communities programme combines both the school based peer planning, teaching, observing, discussing, recording, approach as well as attempts to combine this meaningfully and usefully with the internet driven approach. The approach is both research and study.

A *research lesson* is a lesson designed, closely observed and analysed by more than one teacher.

A *research lesson* is conducted with the aim of finding out more about teaching by:

- trying out some new techniques, methods, resources or ideas

- applying or reapplying and tweaking techniques which have worked somewhere else or which research suggests are important

- trying out new ways of teaching to pupils/groups who present us with new needs or challenges

- sharing what we have learned (success or failure) with others. We 'fail towards success' (Thomas Edison). It works in a culture where we are expected to take professional risks in order professionally to learn.

The *research lesson* recognises that in any lesson we are not only teaching the main curricular objectives, we are also:

- teaching and developing social, behavioural and attitudinal learning

- reinforcing, practising, and applying prior learning and skills

- teaching/modelling metacognitive learning how to learn skills.

A *research lesson* focuses on the intended and actual learning of three case pupils (or multiples of three). Observation, deconstruction and analysis focus and flow from the learning of these three.

Teachers carefully design, observe and analyse the research lesson which may be one of a sequence of research lessons designed to try out, analyse, redesign and try out again. This design and redesign approach is *research lesson study*.

Data collection may be through a number of means – observation notes, discussion with pupils and teacher, video, and analysis of pupil work. Pupils may be involved in these processes once they are understood well by adults.

The outcomes of research lessons must be recorded and disseminated.

The research lesson forms a commonly understood process which can then be accessed across schools, phases, networks and subjects. It has powerful knowledge creation and transfer capabilities.

The following pages contain the design and recording process necessary to get started with research lessons. This recording process is also available as a separate document within *Research Lesson: design and analysis record.*

Please complete the following process sheets as you:

- design the research lesson

- deconstruct and analyse the lesson

- ensure that it is used to add to the bigger school, departmental picture as well as to your own learning

## Teaching enquiry partners

| | |
|---|---|
| *Teachers involved:*     *1.* <br> *2.* <br> *(3.)* | |
| *Class/teaching group* | |
| *Year* | |
| *Subject area* | |
| *School* | |
| *Date planned* | |
| *Date taught/observed* | |
| *Date discussed* | |
| *Where recorded/posted* | |

## Overall pedagogic development theme
*(state – eg AfL, Thinking skills etc)*

## Pedagogic focus
*We are studying the following aspect of pedagogy in relation to our pupil learning enquiry focus or network theme. (Please be specific – eg developing comment only marking in relation to the learning objectives)*

*Is this research lesson part of a sequence of research lessons in a research lesson study?*       Yes / No

*Please list related earlier research lessons which connect with this one.*

# Planning the research lesson

### Intended professional learning

We are hoping to use this research lesson to learn more about…

_Describe what you as teachers/adults want to learn more about as a result of conducting this research lesson_

### Intended pupil learning

Please summarise the key curricular learning as well as other learning which is designed to happen in this lesson / sequence. The other learning may relate to new ideas you are developing, social, attitudinal or behavioural learning or metacognitive or other cognitive processes.

| _Curriculum/subject learning intention(s) (for pupils)_ | _Other learning/development intention(s) – social, linguistic or metacognitive (for pupils)_ |
| --- | --- |
| | |
| | |

## Case pupils – summary of learning needs

Identify the case pupils whose learning you will be focusing on for this research lesson.

| Name | one | two | three |
|---|---|---|---|
| *Why chosen for focus eg higher attaining, gender, learner type* | | | |
| *Level of operation in this area (eg NC level a/b/c/)* | | | |
| *Any learning needs in relation to this lesson* | | | |
| *Intended needs you are addressing and related outcomes you are hoping for from this pupil: (to be able to ...)* | | | |
| *Cognitive* | | | |
| *Social* | | | |
| *Cognitive Metacognitive / linguistic (eg to be able to concentrate for...)* | | | |

**Development over the focus session**

If the learning is taking place over a number of sessions and the research lesson observation takes place during only one of those summarise the sessions sequence here.

| Session | one | two | three |
| --- | --- | --- | --- |
| What I want them to learn | | | |
| Learning method I want to develop and learning opportunities I need to set up | | | |
| Activities | | | |
| Things I will need to do to access the learning. Support/grouping/resources | | | |
| What I will be looking for as evidence that learning has taken place – assessment | | | |

## Observing the research lesson

### Data gathering
What methods will be used to gather data (please tick and note as necessary).

|  | Observer (1) | Observer (2) | Teacher | Pupil(s) |
|---|---|---|---|---|
| Annotated plans |  |  |  |  |
| Observation notes |  |  |  |  |
| Video |  |  |  |  |
| Discussion with pupils |  |  |  |  |
| Work analysis |  |  |  |  |
| Sociogramme etc |  |  |  |  |
| Classroom climate analysis |  |  |  |  |

**Procedure for partnership/observation teaching session**
What each teacher will be doing at each stage of the session – eg introduce task, work with focus pupil's group, organise discussion of bridge designs, discreetly observe group discussion etc)

| Step/time | Class teacher | Partner |
|-----------|---------------|---------|
|           |               |         |

**Joint discussion sheet (to be completed within 24 hours of the research lesson)**
In relation to the three case pupils.

*Subject Learning*

*Were the cognitive (subject) learning objectives achieved by the case pupils in a way which was pitched appropriately for their need and challenged them?*

*What did each achieve in relation to the specific intentions? What progress did each make?*

*Metacognitive Learning*

*What progress in learning did they make in relation to the learning to learn strategies focus on in the teaching? What progress did each make? What are the next steps for these pupils?*

*Were they clear about the purpose, objectives and methods of their learning?*

*Were they aware of their achievements and how to overcome difficulties?*

*How well were they able to use method/approach to learning prescribed?*

*Was the combination of learning methods appropriate for the task?*

*Social and affective learning*

*What worked progress in learning did they make in relation to the planned social development or disposition to learning development?*

*Were they motivated and engaged?*

*Overall*

*What worked really well / what problems arose?*

*How effectively were other pupils learning?*

*What would we change next time or if we did this again?*

*1. Agreed pedagogic learning outcomes for class teacher*

*In terms of my future teaching I have learned that…*

•

•

•

*2. Agreed pedagogic learning outcomes for partner observer(s) teacher(s)*

*In terms of my/our teaching we have learned…*

•.

•

•

*3. Agreed pedagogic outcome(s) for school/dept etc*

*We must make sure our approaches and systems take account of…*

•

•

•

*Next steps*

For any peer observation system to work well it is vital to have a clear code of conduct or protocol governing the way feedback is handled. When, where, ground to be covered, outcomes and who the outcomes are shared with. As a rule these should:

- Be based on the principle of no surprises

- Elicit the teacher's view of how things went as a starting point

- Agree positives but also points for development

- Identify agreed pedagogic outcomes which can shared more widely.

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