

**Inter-professional  
Lesson study to  
develop teaching  
approaches for pupils  
with special educational  
needs**

**Guidelines**



**Graduate School of Education**

## INTRODUCTION

Lesson Study (LS) is an approach originally developed in Japan with over a century of use in examining teaching practice to improve teaching and learning. LS is a form of professional learning through teacher enquiry in which teachers in small groups undertake collectively a cycle of 'study-plan-do-review' activities to improve pedagogy (knowledge and strategy) and so pupil learning and progress. One teacher in the team teaches a series of jointly designed **research lessons**, while the other teachers in the team observe the learning of specific pupils (**case pupils**). Pupil learning in the research lesson is then analysed in team meetings (**review and planning meetings**) to inform the planning of the next research lesson.

Lesson study has particular relevance to developing and adapting teaching approaches for pupils with special educational needs in different settings, both ordinary and special settings. This is because of its review and planning focus on case pupils enables a fine grain analysis on the learning and teaching needs of these case pupils. However, LS is not about perfecting specific lessons, it is about professional development and learning to enable more appropriate teaching of pupils with special educational needs.

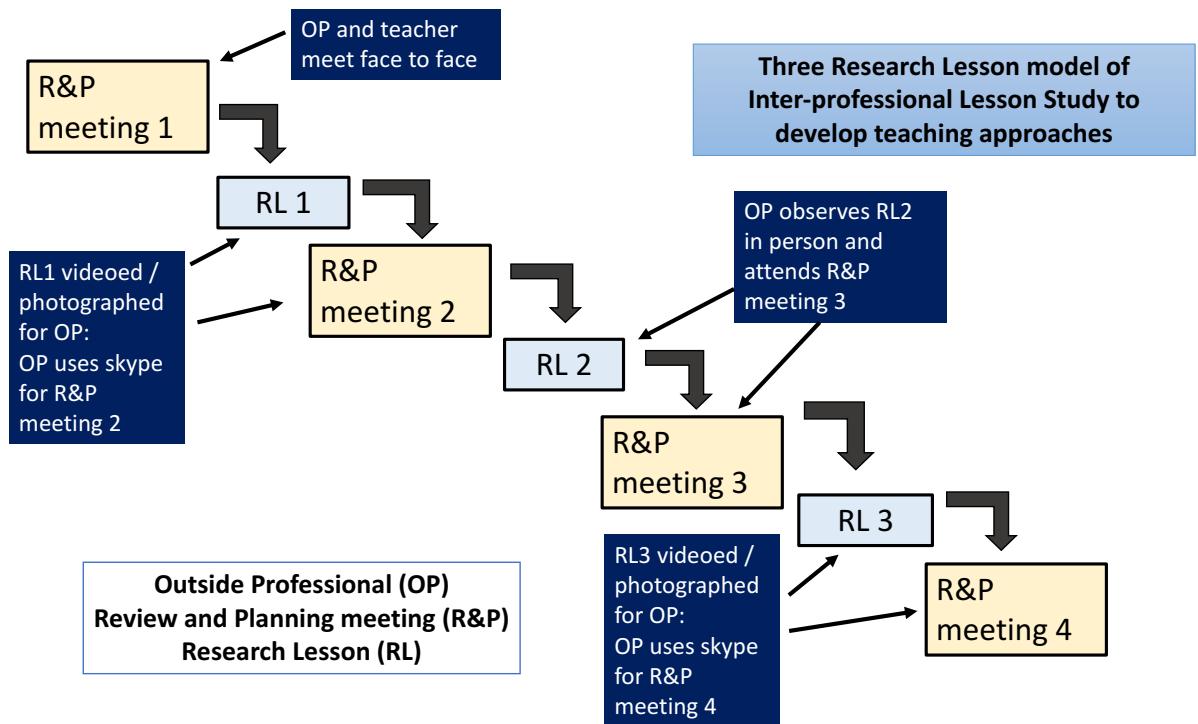
This version of LS is a variation of the **LS to develop teaching approach** to include an Outside Professional (OP) into the LS team as a **form of** inter-professional collaboration. The OP could be an Educational Psychologist, a specialist teacher or a therapist, such as Speech and Language Therapist.

This guidance takes you through this version of lesson study by introducing the key terms used, represents the process with flow diagrams and comments on each of the steps using the provided templates to guide teachers through the process and on which notes can be made of observations, decisions to recall and plans. Connected to this guidance is the set of templates that LS teams can use.

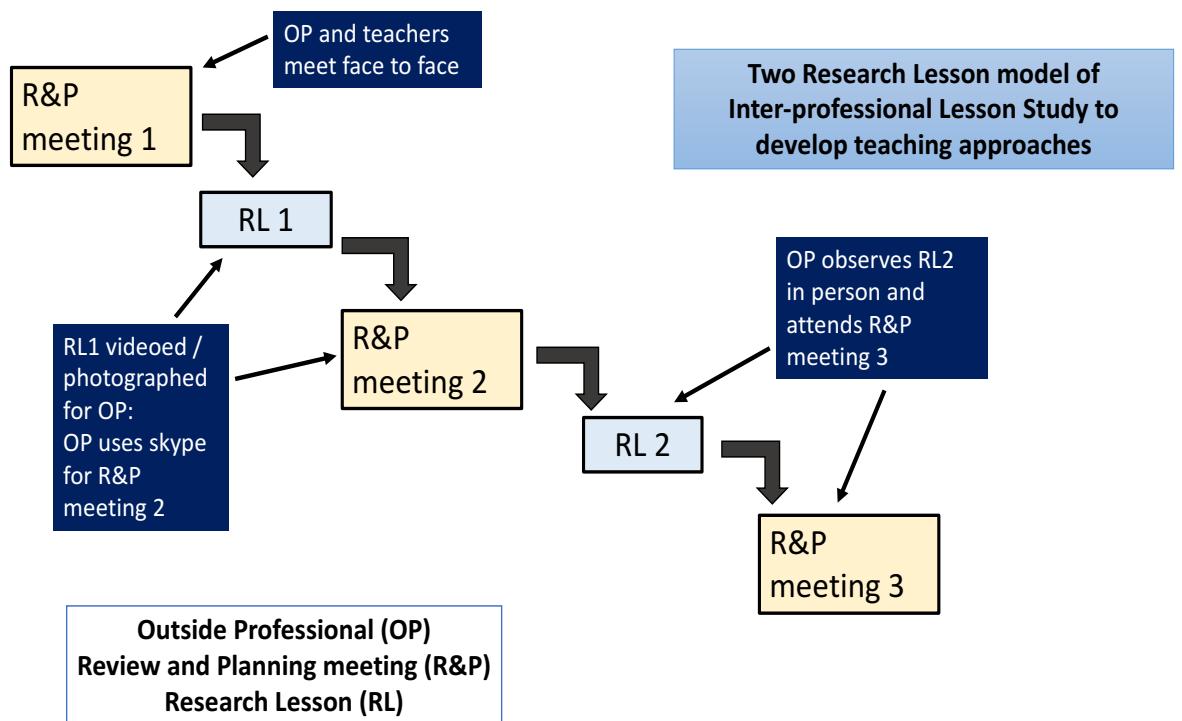
### Key Language: as in models of lesson study below

Phrase	Description
<b>Lesson Study</b>	A sequence of 2 or 3 research lessons preceded and followed by 3 or 4 review and planning team meetings usually taking place over a period of time, e.g. 3 weeks or half a term
<b>Research Lesson</b>	A single research lesson forms part of the lesson study sequence. It is jointly planned, taught by one member of the team and then subsequently reviewed by the team.
<b>Case pupils</b>	These are the pupils who have been identified as the focus of the lesson study process – around whom the planning is done and whose learning is monitored and reviewed for subsequent research lessons. Usually 2-3 case pupils are identified for a lesson study
<b>Review and planning meeting</b>	The meetings in which the lesson study team jointly review and plan the focus of the lesson study. It is good practice for the second to the fourth meetings to take place soon after the research lessons.

## Three Research Lesson Model



## Two Research Lesson model



Step	Activity	What is involved?
1	DECIDE ON PEDAGOGIC FOCUS AND CASE PUPILS	What will be the teaching and learning focus of the lesson study? (area of learning and / or learning behaviours) Which two pupils will represent the pedagogic focus of the lesson study? What outcomes do you as teachers intend to gain from LS process?
2	ARRANGE WHO WILL BE IN THE LS TEAM; DECIDE ON ROLES & HOW THE TEAM WILL FUNCTION.	Who is in team? Why these people? Have you discussed different roles? Will someone chair / coordinate the meetings?
3	DECIDE ON THE WHAT KNOWLEDGE BASE TO INFORM THE PEDAGOGIC FOCUS	What knowledge will the team use that can inform the lesson study focus: practice—professional knowledge and / or research-theory informed knowledge? What knowledge will the Outside professional bring to the LS process?
4	DECIDE ON RESEARCH QUESTIONS RELEVANT TO THE 2 CASE PUPILS.	Using information about the case pupils and the LS focus what questions do you want to answer in the lesson study cycle?
5	DECIDE ON TIMELINE AND HOW THIS CAN BE ARRANGED	What arrangements are needed to make time to do the lesson study? When will the review and planning meetings and research lessons will take place? What arrangements are needed to involve the Outside professional in face to face and distance meetings and to receive videos/photos of the case pupils' learning?
6.	1 <sup>st</sup> REVIEW AND PLANNING MEETING (RP1):	What is your summary review of the case pupils' past learning and needs? How does this review inform the planning of the 1 <sup>st</sup> research lesson so that it answers your research questions?
7.	TEACHING 1 <sup>ST</sup> RESEARCH LESSON (RL1), JOINT OBSERVING AND ASSESS THE LEARNING OF CASE PUPILS	How will you organise the teaching of RL1? How will the case pupils' learning be observed? Who will interview the case pupils about their learning and how?
8	2 <sup>nd</sup> REVIEW AND PLANNING MEETING (RP2):	How will you use the evidence collected to review the case pupils' learning? What are implications for planning the next research lesson (RL2)? What knowledge will be used to make sense of learning and teaching to plan the next research lesson?
9	TEACHING 2nd RESEARCH LESSON (RL3), JOINT OBSERVING AND ASSESS THE LEARNING OF CASE PUPILS	How will you organise the teaching of RL2? How will the case pupils' learning be observed? Who will interview the case pupils about their learning and how?
10	<b>DECIDE HOW TO PROCEED: IF TWO RL MODEL:</b> RP3: FINAL REVIEW OF THE ACHIEVED OUTCOMES. EVALUATING LS AND COMMUNICATING OUTCOMES  <b>IF THREE RL MODEL:</b> GO TO STEP 9 FOR RL3 AND STEP 10 FOR RP4	How will you use the evidence collected from RL2 to review the case pupils' learning? What knowledge will be used to make sense of learning and teaching to plan the next research lesson? How review case pupils' learning to answer initial research question?
11	SUMMARISE FINDINGS AND COMMUNICATE	What are the key points of learning from the LS? Have you completed the summary template How will you communicate to other in your school?

## TEMPLATES TO GUIDE EACH STEP OF LESSON STUDY: TO BE USED TO RECORD ANALYSES AND DECISIONS

**Steps 1 to 5 are about the preparations for the lesson study**

<b>STEP 1: CASE PUPILS, LESSON STUDY FOCUS and GOALS OF LESSON STUDY</b>	
<b>CASE PUPILS</b> Who will be case pupils and why?	<b>COMMENTARY</b> <i>You identify case pupils in this kind of LS whose learning is a source of concern to enhance their learning through trying a different approach to teaching.</i>
Case pupil 1 Male / female: Age / class: Reason chosen:	<i>You can identify 1 or 2 pupils depending on your interests.</i>
Case pupil 2 Male / female: Age / class: Reason chosen:	<i>Record their gender, age/class and reason for selecting them.</i>
<b>WHAT IS FOCUS OF LESSON STUDY?</b>  Subject area of learning? Learning behaviours?	<i>Record the subject area of learning and / or the learning behaviours you are interested to find out more about.</i>
<b>WHAT EXPECT TO GAIN FROM LS – up to three intended outcomes express as know-how and know-that goals for the LS team</b>  1. 2. 3.	<i>Put into words briefly what your lesson study team expect to get out of the lesson study.</i>

<b>Step 2: WHO IS IN THE LESSON STUDY TEAM</b>	
Name school role and outside professional role	LS roles:

### **COMMENTARY**

*You identify case pupils in this kind of LS whose learning is a source of concern to enhance their learning through trying a different approach to teaching.*

*You can identify 1 or 2 pupils depending on your interests.*

*Record their gender, age/class and reason for selecting them.*

*Record the subject area of learning and / or the learning behaviours you are interested to find out more about.*

*Put into words briefly what your lesson study team expect to get out of the lesson study.*

*These are your goals as teachers (not for the pupils) to express in terms of teaching methods (KNOW-HOW) and teacher knowledge and understanding about teaching (KNOW-THEAT) goals.*

*Record the names of people **including the Outside Professional** in the team and consider the various roles required in the LS and agree who will carry out these roles*

*Key Lesson Study roles:*

- LS Coordinator: will there be one?
- Teach the research lessons
- Observe research lesson live
- Interview case pupils at end of research lesson
- Video and/or photo the case pupil learning
- View video / see photos before review/planning meetings
- Record team meeting deliberations/ decisions

<b>Step 3: DECIDE ON WHAT KNOWLEDGE BASE WILL INFORM THE LESSON STUDY PROCESS</b>
<b>What Curriculum Programmes</b>
<b>What Pedagogic Practice</b>
<b>What knowledge base from OP</b>

<b>Step 4: DECIDE ON RESEARCH QUESTIONS RELEVANT TO THE CASE PUPILS</b>
<b>LS research questions for case pupils (1-2 questions)</b>
<b>Pupil 1:</b> 1. What teaching can enable P1 to... 2. How teaching can enable P1 to...
<b>Pupil 2:</b> 1. What teaching can enable P2 to 2. What teaching can enable P2 to

*This is a crucial step in the LS process and the conclusions are to be summarised in the template for this step.*

*You may want to:*

- *try a different curriculum programme and approach*
- *A teaching strategy from a practice handbook or from some other teaching source*
- *Knowledge and understanding from Outside Professional*

**Research question example:**

**'What teaching can enable P1 to engage more frequently in group activity when using key maths vocabulary?'**

**RESEARCH QUESTIONS HAVE 2 ELEMENTS:**

**do something:** specify in terms of one or more of these e.g. engage in activity, understand concept, know something etc.

**under some conditions** specify learning conditions, e.g. individually, in group, using some materials etc.

Scheduling the times of the team meetings and research lessons is a critical step requiring senior management support.

Teachers and OP meet face to face in RP1 to plan 1<sup>st</sup> RL. Videos /pictures taken of the 1<sup>st</sup> RL are sent to OP who does not attend 1<sup>st</sup> RL. OP participates via skype with LS team for RP2. OP is present for RL2 and RP3 (with RP3 straight after RL2). OP not present at RL3 and RP4, but send videos/photos of RL3 and meet via skype for RP4.

**You can be flexible about when OP is present / at a distance for RLs and RPs. Try out skype or communication and vide/phot systems in advance.**

<b>Step 5: TIMING: Decide on timeline</b>	
<b>LESSON STUDY ACTIVITIES</b>	<b>DATE SET</b>
1 <sup>st</sup> review and planning meeting RP1 (OP present)	
1st research lesson RL1 (OP at distance)	
RP2 (OP at distance)	
RL2 (OP present)	
RP3 (OP present)	
RL3 (if planned) (OP at distance)	
RP4 (if planned) (OP at distance)	

## LS CYCLE STARTS WITH A SEQUENCE OF REVIEW AND PLANNING MEETINGS AND RESEARCH LESSONS.

Steps 6 parts I and II are to be completed in the 1<sup>st</sup> Review and planning (RP) meeting. Step 6 part 1 is about lesson planning; Step 6 part II is setting expectations for the case pupils that are used for observation of learning in the 1 Research lesson (RL).

Step 6 part I: 1 <sup>st</sup> Review and Planning meeting			
The subject area and key stage			
The curriculum topic			
Intended learning outcomes (class)			
lesson context (e.g. ability grouping)			
Intended learning outcomes (targets) for case pupils:			
Case pupil 1			
Case pupil 2			
Teaching activities / strategies and rationale			
Materials and resources			
Detailed planned sequence of activities during research lesson			
Research lesson timing	Teaching activity (if in stages)	Student activity	Observation focus

<b>Step 6 part II: Research lesson expect and observe template</b>			
<b>Stage of lesson</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>
<b>Case pupil 1</b>			
How expected to respond			
How observed to respond			
<b>Case pupil 2</b>			
How expected to respond			
How observed to respond			

During the review and planning meeting complete the HOW EXPECTED TO RESPOND rows for the case pupils.

It is crucial to be clear about the observation focus. during the research lesson. The HOW OBSERVED TO RESPOND rows will be completed during the 1<sup>st</sup> research lesson.

TAKE THIS TEMPLATE INTO THE RESEARCH LESSON.

## Step 7 involves teaching the 1st research lesson. One person teaches the research lesson, and the others jointly observe and assess the learning of case pupils.

- To gather evidence about how the learning of the case pupils during the research lesson, you need to use the **Step 6 part II: Research lesson expect and observe** template to provide the focus of the observations. The observations are recorded in the template (as in **Step 6ii** above)
- The case pupils' learning will also be videoed using a camcorder, ipad or mobile phone. Photos of key aspects of learning might also be taken as a less obtrusive approach.

These recordings are for sending to the OP if at a distance and for viewing in the next review and planning meeting.

<b>Step 7: Research lesson: pupil interview</b>	
1. What did you enjoy most about that lesson?	In addition to the observation notes and any video/picture evidence, one of the observing LS team members will also interview case pupils briefly at the end of the research lesson, using a template like this one.
2. What did you learn? (What can you do now that you could not do before?)	The wording of the interview question need to be adapted to the characteristics of the case pupils in advance.
3. What can you do to improve?	
4. What aspect of the teaching worked best for you?	
5. If the same lesson is being taught to another group, what would you change? Why would you change that aspect?	

**Step 8; The 2nd review and planning meeting has 3 parts, i. the review of the case pupil learning in RL1; ii. the implications for planning the next research lesson RL2 & iii. specify how case pupil are expected to respond**

<b>Step 8 Part I: Summarising and analysing evidence collected in 1st research</b>	
<b>Summary of key aspects of case pupil learning</b>	
What were case pupils able to do? What learning progress was made? What difficulties and obstacles became evident?	In the first part of the meeting, review what was learned about the case pupils from the perspective of the research questions about them.
Case pupil 1	Summarise this in the template.
Case pupil 2	
<b>Further analysis</b>	
What further knowledge and understanding might be relevant to make sense of what we found out?	Consider what further knowledge and understanding might help to make better sense of what happened (Study phase in cycle).
What changes to the learning objectives and teaching approaches might be made? And why?	Consider the changes to how you might change the research lesson objectives and teaching approaches
<b>Step 8 part ii</b>	
<b>Intended learning outcomes (targets) for case pupils:</b>	
Case pupil 1	
Case pupil 2	
Teaching activities / strategies and rationale	
Materials and resources	
<b>Detailed planned sequence of activities during research lesson</b>	
Research lesson timing	Teaching activity (if stages)

<b>Step 8 part III: Research lesson expect and observe template</b>			
<b>Stage of lesson</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>
<b>Case pupil 1</b>			
How expected to respond			
How observed to respond			
<b>Case pupil 2</b>			
How expected to respond			
How observed to respond			

During the review and planning meeting complete the HOW EXPECTED TO RESPOND rows for the case pupils.

It is crucial to be clear about the observation focus. during the research lesson. The HOW OBSERVED TO RESPOND rows will be completed during the 1<sup>st</sup> research lesson.

**TAKE THIS TEMPLATE INTO THE RESEARCH LESSON.**

**Step 9 involves teaching the 2nd Research lesson. One person teaches the research lesson while the others jointly observe and assess the learning of case pupils.**

- To gather evidence about how the case pupils learning during the research lesson, you need to use the **Step 8 part III: Research lesson expect and observe** template to provide the focus of the observations. The observations are recorded in the template (as above)
- The case pupils' learning will also be videoed using a camcorder, ipad or mobile phone. Photos of key aspects of learning might also be taken as a less obtrusive approach.

These recordings are for sending to the OP if at a distance and viewing in the next review and planning meeting.

<b>Step 9: Research lesson: pupil interview</b>	
6. What did you enjoy most about that lesson?	In addition to the observation notes and any video/picture evidence, one of the observing LS team members will also interview case pupils briefly at the end of the research lesson, using a template like this one.
7. What did you learn? (What can you do now that you could not do before?)	The wording of the interview question need to be adapted to the characteristics of the case pupils in advance.
8. What can you do to improve?	
9. What aspect of the teaching worked best for you?	
10. If the same lesson is being taught to another group, what would you change? Why would you change that aspect?	

## Step 10: DECIDE HOW TO PROCEED

If you decide as a team at this step that you have learned enough from the lesson study, then you can use the **TWO RL MODEL**.

The 3<sup>rd</sup> and final Review and planning meeting will now focus on reviewing the achieved outcomes of the LS and planning how to communicate the findings. **Go to step 11 now.**

If you decide as a team that you want to try another round of planning and teaching as there is more to learn as a team, then you can use the **THREE RL MODEL**.

The 3<sup>rd</sup> Review and planning meeting will be like the 2<sup>nd</sup> one, so follow step 8 followed by step 9 for the 3<sup>rd</sup> research lesson.

Then go onto the final step 11 – the 4<sup>th</sup> Review and planning meeting - to review the achieved outcomes of the LS and planning how to communicate the findings

## Step 11: SUMMARISE AND COMMUNICATE FINDINGS

**In this concluding step you answer these questions in the final review and planning meeting:**

- **What are the key points of learning from the LS?**
- **How will you communicate to other in your school?**

<b>Step 11: Evaluating Lesson Study</b>
What was learned about pupil learning? What was Impact on pupil learning and progress?
What was learned about teaching? What was impact on teaching practice and future teaching
Reflections about lesson study
How will the team communicate and disseminate the LS outcomes.

In the final review and planning meeting, the team draws on its analyses of the evidence from the previous research lessons to draw conclusions about professional learning, pupil learning, implications for future practice and how conclusions are to be shared with other teachers.

### References:

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