Lemas
LEISTUNG macht SCHULE

Universität Potsdam

LESSON STUDY

Working Together to Improve Education

This brief summary guides you step by step through the Lesson Study process and provides helpful questions to help you stay on track and reflect on your experience.

What is Lesson Study?

Lesson Study is a **collaborative method for developing instructions** and, at the same time, an effective tool for teachers' self-directed professional development.

- **Goal**: Teachers learn new things together, refine their teaching methods, and receive direct, practical feedback from the classroom.
- **Procedure**: A team of 3–6 teachers collaboratively plans a lesson based on a central research question that addresses a specific challenge encountered in everyday classroom practice. One teacher conducts the lesson, while the others observe its impact on the students. Afterward, the observations are analyzed and reflected upon together.
- **Sustainability:** Lesson Study is not a one-time event, but is conducted regularly (e.g., once every six months) as an ongoing professional development process.

What are the benefits?

Lesson Study has demonstrated added **benefits** in many areas**:**

- This method provides a structured framework for systematic, long-term teamwork, thereby strengthening **collaboration** among staff members.
- The team independently selects content and addresses **specific challenges encountered in everyday classroom settings**, enabling them to develop practical, targeted solutions.
- This collaboration is characterized by a **reflective, exploratory approach**—which reveals how teaching actually works and where there is room for improvement.
- During classroom observations, the focus is not on the teacher but on the **students' learning behavior**. This makes it possible to see directly whether and how the lesson is effective.

How does Lesson Study work?

The compact Lesson Study Handbook is available for free download on our website.

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Phase 0: Preparing the Lesson Study process

Goal: Clarify the scope and focus of the Lesson Study process
Time: 1 Meeting

Procedure: Form a team of about 3–6 teachers. Set a goal and a focus for your work with Lesson Study. Also, assign roles for the collaboration (e.g., facilitator, note-taker, etc.). For new teams, it is advisable establish common ground rules for collaboration, such as having positive expectations, being punctual and being open to different perspectives.

Possible overarching goals could include:

- **School Development:** Lesson Study is used to concretely implement the core values of the school's mission statement (e.g., fostering gifted students, inclusivity, and digital learning) in the classroom.
- **Professional Competencies:** Lesson Study serves as an in-school professional development program through which teachers can learn about, try out, and collaboratively refine new strategies and methods.
- **Student-Centered Approach:** Lesson Study is used to learn more systematically about the needs of a diverse student body and to tailor instruction specifically to those needs.
- **Collaboration:** Lesson Study serves as a structured framework for professional exchange and the long-term, collaborative development of instruction among the teaching staff.

Food for thought

- What organizational requirements (e.g., commitments, space, time, etc.) need to be clarified for implementation, possibly in consultation with the school administration?
- Who will communicate with the school principal / leadership team if they are not part of the team?
- Remember to set a date for the next team meeting.

For more information on Phase 0, see pages 16–19 of the handbook.

Phase 1: Identify a challenge and formulate a research question

Goal: Determining a central research question for the process and preparing to conduct the research lesson (selecting a class, assigning a teacher)
Time: 1 Meeting

Procedure: As a team, discuss the key challenges you face in your teaching. Then, choose a common topic and formulate a research question that is as brief and precise as possible—one that will serve as the focus for your future work. Also, decide in which class and unit the research lesson will take place, and set a date.

Possible research questions for reflection:

- What challenges do you see in a particular subject?
- What teaching strategies would you like to try out, implement, or further develop?
- Which of your students' thinking and learning processes would you like to understand better?

Possible research questions:

(1) *How can we identify students with potential talent for science at the start of 5th grade?*

(2) *How can we empower our students to engage in self-regulated learning by introducing specific routines?*

Food for thought

- Formulate the research question as a "how" question and use the personal pronoun "we."
- Remember to set a date for the next team meeting.

For more information on Phase 1, see pages 20–22 of the handbook.

Phase 2: Researching and planning the research lesson

Goal: Planning the research lesson and write a lesson plan
Time: 2-3 Meetings

Procedure: Gain targeted new knowledge related to the research question, for example, by researching textbooks, educational standards, or resource collections, as well as by consulting with external experts (such as academics, state education agency staff, or colleagues from other schools). Then, work together to plan a lesson that focuses on your topic, highlights the specific aspects you wish to explore, and allows you to investigate them.

Suggested questions to consider during the planning process:

- What prerequisites (knowledge, skills, strategies) do students need to achieve the learning objectives of the unit/lesson?
- How can we determine during the various phases of the lesson, that students are engaging with and understanding the subject matter and content?
- What typical mistakes and misunderstandings might arise?
- What method (e.g., learning activity curves, interviews, systematic observation logs) will we use to observe student learning? Which students do we want to focus on, and why?

Food for thought

- Lesson planning is done as a team, though not necessarily all together at the same table. Assign tasks (e.g., research, creating worksheets) to individual team members.
- It is often helpful to think in terms of a series of lessons rather than individual lessons. When developing a series, select a suitable research lesson from it that is particularly insightful in relation to your research question.
- Arrange for substitute teachers for the participating educators well in advance, inform the school principal / leadership team, and organize a room for a joint debriefing after the research lesson.

For more information on Phase 2, see pages 23–33 of the handbook.

Phase 3: Teach and observe

Goal: Observe the research lesson and collect data
Time: 1 Lesson

Procedure: Let the class know about the visit. If possible, review the lesson plan as a team on the day of the research lesson and decide who will observe which student. During the research lesson, take structured notes on the students' learning behaviors, depending on your observation method. At the end of the lesson, collect the students' work products, if necessary, or conduct brief interviews.

Food for thought

- Classroom observations are often associated with teacher evaluations. In Lesson Study, however, the lesson is planned collaboratively, with all participants sharing equal responsibility for its success. The focus of the observation is explicitly on the students' learning behavior—not on the teacher.
- In your notes, record what you specifically see or hear (e.g., "Tom is looking out the window"). Avoid interpretations or assumptions (e.g., "Tom is bored").
- As an observing teacher, do not intervene in the lesson and remain as inconspicuous as possible. Do not speak to the students.
- Do not discuss the lesson immediately at the end of the research lesson; instead, wait until the start of the evaluation session.

For more information on Phase 3, see pages 33–36 of the manual.

Phase 4: Analyze and reflect

Goal: Evaluation and reflection on the research lesson
Time: 1 Meeting (max. 2 hours, directly after the research lesson)

Procedure: Reflect together using the following steps:

- **Overall impression:** Briefly describe the impression you came away with from the lesson (max. 5 min).
  - Were your expectations met? Were there any surprises?
- **Describe:** Share your observations with each other.
  - How did the students learn? What results did they achieve (e.g., poster, worksheet)?
  - Which of these situations would you like to analyze in more detail?
- **Explain:** Take a closer look at the data collected from the classroom.
  - What might be the source of any misunderstandings or mistakes made by the students?
  - How can the observed learning behavior be explained?
- **Identify possible courses of action:** Answer your research question and formulate specific courses of action for your next steps.
  - What insights can you apply to your own practice?

Food for thought

- Appoint someone to act as the moderator and keep track of the time.
- Write down the most important observations, explanations, and options for action (e.g., on a flip chart where everyone can see them). Document your findings (e.g., through photos or in meeting minutes).
- Finally, clarify any questions regarding a potential next Lesson Study process and, if necessary, set a date for your next meeting.
- Afterward, share your results within your school (e.g., via a short presentation, or report) and make your teaching materials available for future use (e.g., by creating a collection of materials at the school).

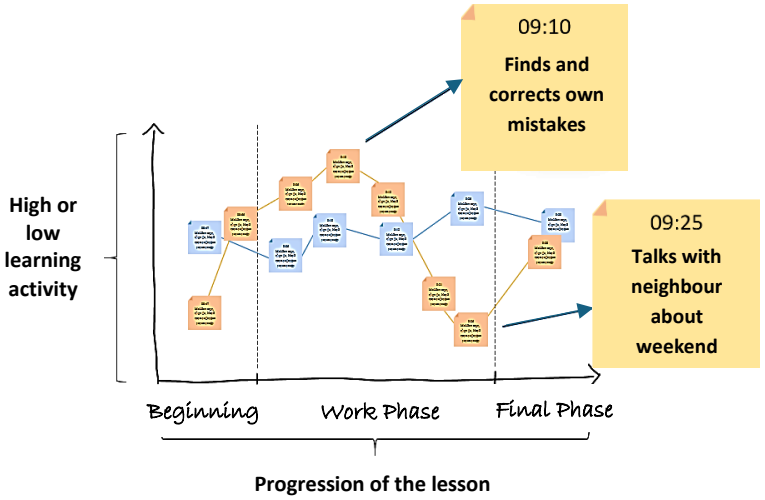
For more information on Phase 4, see pages 37-46 of the handbook.

Example of an observation and evaluation method: learning activity curves

Goal: Document students' learning in small steps so that it can be visualized later during the debriefing session

Procedure during the research session: Before the research lesson, each observing teacher receives a stack of colored sticky notes. For the observation, each teacher is assigned a student who is given a specific color. During the lesson, all observations are noted individually on sticky notes along with the time.

Procedure after the research lesson: For the analysis, learning activity curves are created for each student using the sticky notes (e.g., on a whiteboard). To do this, the observing teachers plot their notes sequentially on a coordinate system (X-axis: progression of the lesson; Y-axis: learning activity). The resulting curves allow for the classification of learning activities over the course of the lesson and for comparison among students. By "learning activity," we mean any activity performed by students for the purpose of learning.



Food for thought

- For the research session, you will need sticky notes in various colors, pens, clocks, and possibly writing pads.
- When observing, it is important to remain as objective as possible and to note only the visible learning activities—no interpretations yet.
- 20 sticky notes per student is a good guideline for the analysis.

More on learning activity curves, including questions for describing the curves, can be found on pages 27 and 41-42 of the handbook.

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