



A Union of Professionals

What is Lesson Study?

Lesson study is the primary form of professional development for Japanese teachers. Its goal is continual improvement of teaching so that children will learn more. Its primary focus is how students think and learn.

It differs from other forms of professional development because it takes place in the moment of teaching and learning. Its focus, as described by Jim Stigler and James Hiebert in *The Teaching Gap*, is teaching not teachers, children working, not children's work. The success of a lesson study is measured in teachers' learning, not in the perfection of a lesson. That better lessons are created is a secondary byproduct of the process but not its primary goal.

Groups of teachers work to formulate lessons that are taught, observed, discussed, and refined. Teachers engage in lesson study only a couple of times a year because the process is intense.

A lesson study cycle consists of:

- Selecting a focus
- Planning the study lesson
- Public teaching of the lesson
- Focused observation of the lesson based on the group's goals
- Evidence-based debriefing
- Revision based on the group's reflection
- Teaching of a revised lesson
- Evidence-based debriefing

Planning is not ordinary lesson planning. An important part of planning a study lesson is called *kyozai kenkyuu*, which has been translated by Makoto Yoshida to mean intensive study of materials. This does not mean textbooks alone, but includes understanding the topic being taught, examining materials for teaching it, and seeking any research that might exist. Sometimes a team will call upon an expert in the field to help think through the content. Along with this, great attention is given to:

- what you want students to know at the end of the lesson
- how to engage or motivate students
- the question to be posed and how best to word it to make students think
- how students are likely to think and how to respond to anticipated errors
- how to arrange the work produced so it tells the story of the lesson, and
- how to end the lesson to help students make sense of it.

All of this is consistent with AFT's view of effective professional development and the ER&D program.

For more information on the process, go to www.lessonresearch.net. The article *A lesson is like a swiftly flowing river* was published in AFT's journal *American Educator*.

Questions and Answers

How large must a Lesson Study group be? There is no specified size. Groups can be as small as three or as large as 16.

How do you get started? It is helpful for those in the group to attend an awareness session on lesson study (LS) or to attend a study. Several videos are now available for use in such presentations. A group that is willing to work through the LS cycle should then set a schedule of meetings over a four to six week period and a date for the lesson to be taught.

What support is necessary? Groups benefit from the guidance of a person knowledgeable about lesson study. They also may want to involve a content specialist as they work through questions about content and/or as an observer and commentator. It is essential that arrangements be made for members of the study group to observe the lesson when it is taught. A place also should be reserved for the debriefing.

What are key points for a Lesson Study Group to keep in mind?

- The purpose of the study is to learn something about students' thinking. It is not a demonstration lesson.
- Comments and reflection should focus on the goals set by the group, not on an individual teacher or someone else's agenda.
- Everyone has something to contribute and all ideas should be respected and weighed. If there were already a recipe for teaching something perfectly all students would be high achievers and there would be nothing to explore. But teaching is a complex act and there are many reasons lessons may work in one situation and not in another.
- Do not try to rush the process. Teachers too often try to begin with a lesson in mind instead of with goals in mind. Even with goals, they want to jump to the lesson before investigating the how the content develops and what prior knowledge students must have.

What do teachers get out of Lesson Study?

- Lesson Study at its inner core makes teachers more aware of how students think and learn.
- It reveals the importance of knowing both the big developmental picture of what you are teaching and the value of paying attention to and working out minute details that affect student learning.
- It emphasizes the need for clear goals and focused lessons.
- It draws attention to the importance of getting language right.

- It brings home the need to think ahead to how you will close a lesson so students can make sense of it.
- The learning it produces in teachers is used throughout their teaching.
- Even students have said that they feel good that adults are interested in how they think.
- It does produce a group of lessons that are available for sharing along with reports of what works well and what not so well.

AFT Thinking Mathematics Lesson Study Groups

AFT currently supports lesson study groups in Rochester, NY, Volusia County, Fla. and Scranton, Pa. These groups emerged as a natural and powerful follow-up to training in the ER&D *Thinking Mathematics* program.

While *Thinking Math* provides initial research-based knowledge about how children learn, lesson study affords a long-term process for applying that knowledge to particular lessons and deepening it. It is, according to Catherine Lewis, "an ongoing method to improve instruction based on *careful observation of students and their work.*"

Since teachers in the study groups are from different schools, much of the initial discussion is online. It is our goal that after initial support from AFT, lesson study groups will continue on their own and become both school and district-based.

Although we have started the process with mathematics, Lesson Study is a process applicable to all subjects.

You can access two lesson study reports by clicking the links below.

- What Happens to Area When the Sides of a Square are Doubled? (Revision)
<http://resource.aft.org/thinkmath/downloads/RochesterrevisedArealessonreport.pdf>
- Volusia County Thinking Math Lesson Study: The Distributive Property
<http://resource.aft.org/thinkmath/downloads/VolusiaLSDistributiveFinal.pdf>

For more information on AFT's lesson study groups contact Alice Gill in the Educational Issues Department at agill@aft.org or 202/393-6384.

Lesson Study Comments by Participating AFT Teachers

“A study lesson for once in our professional lives is not about teachers as performers. It’s about students and what they do and think about, what they get or don’t get from what is provided for them in the classroom environment.”

*Nancy Sundberg
Rochester, NY*

“The process of lesson study has been incredible. So much learning has taken place. Planning the lesson with such care and detail in the wording was so incredibly important. Just in this step alone, I feel like I have grown.”

*Danielle Peters
Rochester, NY*

“Lesson study changes you forever as a teacher. You never plan a lesson again without thinking of student misconceptions, responses, having students clarifying and putting the responsibility for learning on the students. Students *and* teachers struggle with learning for deeper understanding. Both are learners.”

*Rebecca LaChapelle
Rochester, NY*

And from a veteran Japanese teacher: “A great one-hour lesson is worthless unless we try the same in our everyday teaching.”

*22-year veteran Japanese teacher
Murata & Takahashi (2002)*

Links to Lesson Study Sites

Catherine Lewis
Mills College

<http://lessonresearch.net/res.html>

Research for Better Schools

<http://www.rbs.org/currents/0502/index.shtml>

Makoto Yoshida
Global Education Resources

<http://www.globaledresources.com/>

Clea Fernandez
Lesson Study Group at Columbia
<http://www.tc.edu/lessonstudy/>