## An Overview of Lesson Study

Lesson Study Research Group (LSRG)

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## What is Lesson Study?

Lesson study is a professional development process that Japanese teachers engage in to systematically examine their practice. The goal of lesson study is to improve the effectiveness of the experiences that the teachers provide to their students.

## A Focus on the Examination of Lessons

The core activity in lesson study is for teachers to collaboratively work on a small number of "study lessons". These lessons are called "study" lessons because they are used to examine the teachers' practice.

### Working on a Study Lesson:

#### 1. Research and preparation:

The teachers jointly draw up a detailed plan for the study lesson.

### 2. <u>Implementation</u>:

A teacher teaches the study lesson in a real classroom while other group members look on.

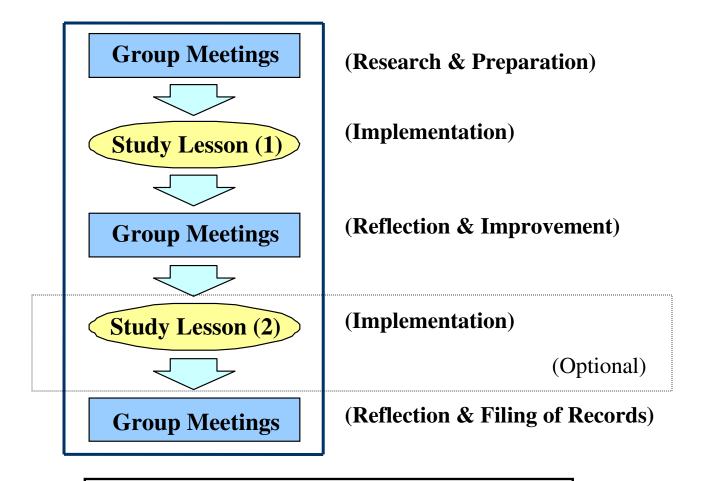
#### 3. Reflection and improvement:

The group comes together to discuss their observations of the lesson.

## 4. <u>Second implementation and reflection</u>: (optional but recommended)

Another teacher teaches the study lesson in a second classroom while group members look on; this is followed by the group coming together again to discuss the observed instruction.

## Working on a Study Lesson:



Average time= 10-15 hours in about 3 weeks

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## 1. Planning a Study Lesson



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## 2a. Implementing the Study Lesson



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## 2b. Observing the Study Lesson



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## 3. Reflecting on the Study Lesson



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## Re-Implementing the Study Lesson



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## Reflecting on the Study Lesson



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# Lesson Study is a Goal-Driven Activity

Teachers select an overarching goal to guide their work on all the study lessons.

- A school generally works on the same overarching goal and same content area for 3-4 years.
- Every year the overarching lesson study goal is refined as the group's understanding of this goal evolves as a result of doing lesson study.
- For each study lesson, the teachers also select lesson-specific goals.

# The Process for Setting an Overarching Lesson Study Goal

- The teachers will identify and discuss the gaps they see between the kinds of children they want to nurture and the types of students that are actually growing up in the school.
- The teachers will then select a goal to work on that they feel will help them move closer to their aspirations for the students.

## Examples of Overarching Lesson Study Goals

- "Fostering students' lively and autonomous behaviors by developing their physical strength and health."
- Using a Japanese language class to "foster students' ability to wrestle with topics they discover on their own."

# The Process for Setting Levels of Goals in Lesson Study

- <u>Step 1</u>: The teachers select an overarching lesson study goal (see previous slides).
- <u>Step 2</u>: The teachers identify content-specific goals to focus on in the study lesson.
- <u>Step 3</u>: The teachers think about the relationship between the study lesson's content-specific goals and the overarching lesson study goal.
- <u>Step 4</u>: The teachers identify areas to focus on for the content-specific goals.

# Examples of the Levels of Lesson Study Goals

- <u>Step 1</u> (overarching lesson study goal): "Students will become independent problem solvers."
- <u>Step 2</u> (content-specific goal): "How to find the area of a triangle"
- <u>Step 3</u> (relating content-specific goal and overarching lesson study goal): "Students will independently discover how to find the area of a triangle."
- <u>Step 4</u> (identifying content-specific areas to focus on): "To explore how manipulatives can be used to help students independently figure out the formula for finding area of a triangle."

### The Lesson Plan Format

• You may download a sample study lesson plan format directly from the resources section of the LSRG website (www.tc.edu/lessonstudy), under "Tools for Conducting Lesson Study".

# The Lesson Plan is the Backbone of Lesson Study

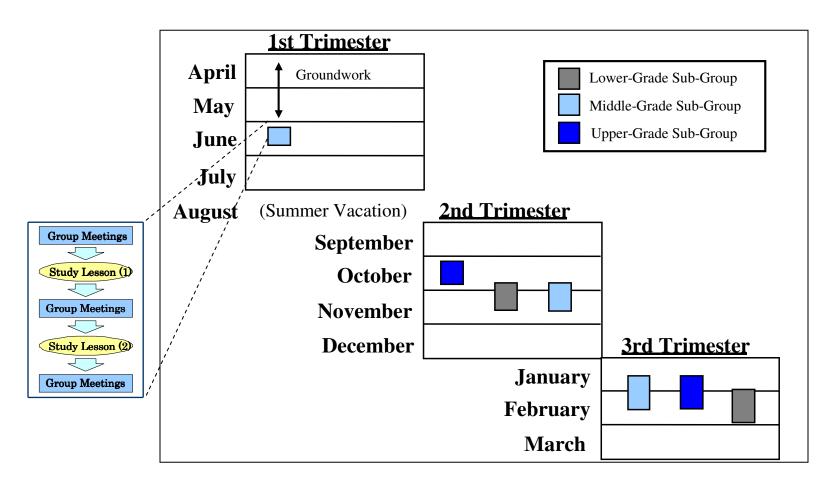
The lesson plan supports the lesson study process, by serving as a:

- Teaching tool--it provides a script for the activities of the lesson
- Communication tool--it conveys to others the thinking of the teachers who planned the lesson
- Observation tool--it provides guidelines for what to look for in the lesson, and a place for the observers to record and share these observations.

## The Organization of Lesson Study

- Study lessons are planned by sub-groups of 4-6 teachers who generally teach the same/ similar grades.
- Each sub-group will generally carry out 2 or 3 lesson study cycles per year, which they schedule in advance around important school events (e.g., festivals, testing).
- Sub-groups working on a study lesson have a weekly meeting time, generally after school.
- Time is also scheduled for teachers to share their work across sub-groups.
- In addition to the teachers who worked on the study lesson, other teachers at the school make every effort to come view and discuss the study lessons.

# Example Schedule for a Year of Lesson Study



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## How Do Lesson Study Groups Share Their Work and Exchange Ideas?

- Reports/ Publications
- Outside Advisors
- Lesson Study Open House
- Rotations of Teachers
- Structural Supports for Teachers

### Reports and Publications

Teachers write reports about their lesson study work, which they often share with other teachers/ schools.

- These reports are often published and are available at bookstores. In Japan, teachers publish *more* than researchers.
- The report is more than just a collection of lesson plans and lesson materials. It is a reflective piece that includes a discussion of the motivations, goals, achievements, and challenges behind each lesson study process.

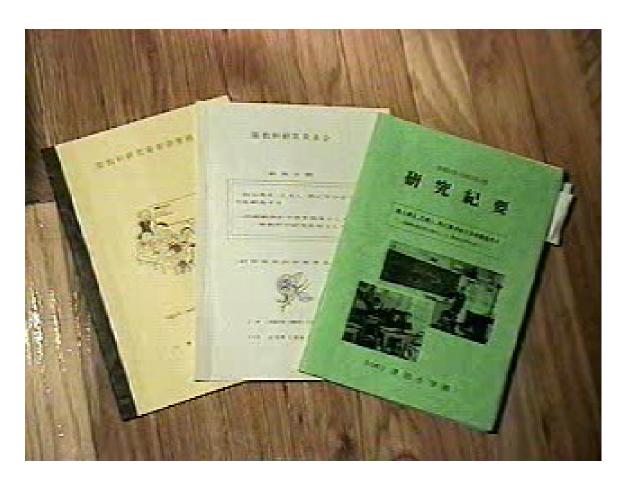
### Excerpt from a Report:on the overarching goal

**Example of an overarching goal statement**: "Promoting students' ability to think autonomously, invent, and learn from each other while focusing on problem solving in mathematics."

Summary written by the teachers about how they identified the above overarching goal: The students at this school are cheerful, obedient and are very enthusiastic about learning. However, it seems as if they have not acquired the skills to think deeply about one problem, listen and pay attention to the comments of other students, and respect the opinions of other students. Moreover, as the students reach the upper grade levels (fifth and sixth grade), they become more and more afraid of making mistakes in front of other students. As a result of this fear, they become less willing to be active participants in the learning process. In order to address these problems, our school decided on the topic "Promoting students' ability to think on their own, invent, and learn from each other." We felt that by choosing this topic we could build on each students' strong desire to learn (when they face a new subject) and teach (them how to enhance their learning from) other students' ideas and from their mistakes (and the mistakes of others), while at same time fostering a feeling of success among all the students.

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## Research Report Booklet



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## Publications by Teachers

Education Section at Japanese Bookstore:



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### Outside Advisor

- Also known as the "outside examiner", "invited advisor", or "reactor"
- This person is usually an outside expert or researcher, who has been invited to occasionally advise the group.
- The invited advisor serves three purposes: (1) to provide a different perspective when reacting to the lesson study work of the group; (2) to provide information about math content, new ideas, or reforms, and (3) to share the work of other lesson study groups.

## Lesson Study Open House

- The open house allows a school to share its lesson study work with other schools, although not all schools in Japan conduct open houses.
- The main activities of the open house are teaching study lessons for the invited guests (usually teachers and principals), and discussing these study lessons with them.
- Lesson plans are distributed to guests, along with a booklet that describes the school and the lesson study work being conducted there.
- The outside advisor also attends these events.

## Open House Study Lesson (6th Grade)



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## Open House (Post-Lesson Conference):



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### Party Time!!



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### Rotating Teachers

In Japan, the movement of teachers both across and within schools allows teachers to exchange their ideas.

- Teachers are regularly rotated across schools. Typically, a teacher can only stay at the same school for a maximum of 10 years.
- Teachers are also regularly rotated through grade levels *within* their schools.

### Structural Supports for Teachers

- Within schools, the structure of the teachers' staff room also facilitates the sharing process, since the teachers' desks are arranged together in a single room.
- While the students' school day ends at 3 PM, the teachers' workday ends at 5 PM; this schedule provides more time for teacher activities (including lesson study).
- A common national curriculum (Ministry of Education's Course of Study Guidelines) also supports the sharing of lesson study conversations across schools.

## Lesson Study is Conducted in Many Forms and Venues

In-school

Whole group

Content area study groups

Across schools

Regionally organized

Voluntarily organized clubs and circles

Organized by educational associations and institutions

Part of mandated beginning teacher education\*

\*Note: pre-service teachers in Japan have less student teaching experiences than U.S. teachers, but more mandated in-service training, which includes lesson study activities

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## How Widespread is Lesson Study?

- The vast majority of elementary schools and many middle schools (but very few high schools) in Japan conduct *formal* lesson study.
- However, the lesson study "mentality" is very widespread, and often leads to *informal* lesson study activities (planning, teaching, observing, and reflecting) about practice. As one Japanese teacher put it, "Whenever I have a free period, I go to another classroom and sit down at the back of the classroom and pretend that I am a student."