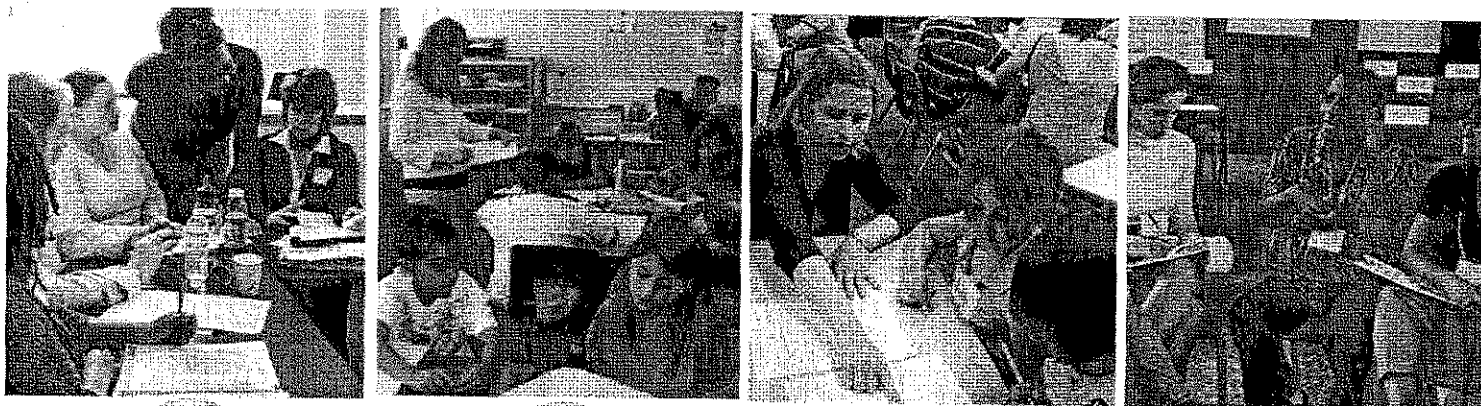


Appendix S
Lesson Study Step by Step

LESSON STUDY

STEP *by* STEP

*How
Teacher Learning Communities
Improve Instruction*



1

2

3

4

Catherine C. Lewis and Jacqueline Hurd

HEINEMANN
Portsmouth, NH

STRATEGY	RESOURCES
Build awareness, recruit volunteers.	With colleagues, read an article or book or watch a video on lesson study, in order to identify interested collaborators.
Transform an existing group.	Groups in your district or region may provide a natural start for a lesson study group: <ul style="list-style-type: none"> • Committees on curriculum, standards, assessment, etc. Research lessons can bring their ideas to life in the classroom, for others to see. • Mentor teachers, coaches, or subject matter specialists. Research lessons provide a way to refine, spread, and examine their ideas about good practice.
Reshape current work to include lesson study.	<ul style="list-style-type: none"> • Grant-funded work. Perhaps a funder would welcome an open house research lesson instead of the traditional final report. Public research lessons provide built-in accountability and can disseminate grant-funded work. • Professional development credits. Rather than steer teachers toward individual coursework or one-shot conferences, how about making lesson study groups an option? • Program quality review, school improvement plans, etc. Lesson study provides a structure for setting goals, improving instruction, and assessing student development. • Pro forma reviews. Tenured teachers might be given the option of conducting a research lesson in lieu of current requirements (such as observation by the principal).
Contact local members of a union or subject matter organization.	Teachers' unions and subject matter associations have been pioneers of lesson study (e.g., Dubin 2009). Science museums, schools of education, and other local institutions may partner to develop a lesson study group or network.
Find a school with a supportive mission.	An existing or planned magnet school or professional development school could incorporate lesson study as a key operating principle.
Gather your buddies.	Working with a few colleagues, start a small lesson study group, where you can learn together how to do lesson study. If your group builds and shares useful knowledge, interest and support are likely to follow.
Look online.	Information about lesson study groups is beginning to be available online. You may be able to find interested individuals in your area by contacting a lesson study network, e.g., lsnetwork@mailman.depaul.edu .

Figure 3-2 Strategies to Recruit a Lesson Study Group

matter group—that is eager to strengthen its impact on classroom instruction. Successful lesson study efforts can also begin in a summer workshop, where teachers are able to try out lesson study outside the busy pace and demands of the regular school year. Ideally, lesson study should not feel like something additional to do; it should feel like a tool that enables one to work more effectively at the core learning within teaching—for example, learning to use a new curriculum to reach struggling learners, or to enact other current priorities.

Lesson study is most likely to be effective when integrated into other ongoing work, such as implementation of a new curriculum or standards, improvement of instruction in a particular area, long-term planning, or program quality review. Offering lesson study as an alternative way to meet an existing obligation (such as yearly review or professional development credits) recognizes that many teachers need something taken off their plates before they have room for something new. Or perhaps you want to form a group initially with just a few trusted colleagues who also enjoy the challenges of trying an emerging innovation. Whatever approach you choose, remember to be open and welcoming to curious outsiders. A sample first meeting agenda for groups new to lesson study is included in Appendix E to help you get started.

Determining the Best Size and Makeup of Your Group

Optimal group size for planning a research lesson is probably about four to six teachers. But for activities like selecting your research theme, locating good research and curriculum materials, and observing and discussing lessons (particularly on the second or third teaching), you may benefit by working with other groups or invited outsiders.

For school-based lesson study, developing the research theme as a whole faculty provides a very important shared experience for teachers, connecting their work across the school, after which teachers can break into smaller teams to plan research lessons informed by the shared research theme. It is typical for teachers from one grade level or two adjacent grade levels to form a group (since this enables them to focus on a topic at a single or adjacent grade levels). However, groups may be formed in other ways, depending on a school's goals. For example, teachers might form groups based on the particular subject matter they want to research (e.g., writing, mathematics) or the particular differentiation strategy they want to investigate. Cross-grade-level lesson study teams are a powerful way for teachers to understand how a concept develops across the grades. Lower-grade teachers can see the importance of their piece of the curriculum at successive grade levels. Upper-grade teachers can see how younger students learn particular concepts and can connect their own instruction of new concepts to the examples and models used in prior years.

For secondary schools, it is typically most effective to work with teachers who teach in the same content area so that you can build shared ideas about the important concepts, see how the curriculum fits together across years, and work together to deepen your knowledge of recent scholarship and teaching strategies in your shared discipline. However, interdisciplinary lesson study may also work well in certain circumstances. For example, teachers from several disciplines may work together to improve students' writing or their strategies for comprehension

of nonfiction. A successful school reform network in Japan includes many junior high schools whose teachers work together across disciplines to build student attendance and connection to school, by reshaping instruction in all subjects to emphasize inquiry and collaboration (Lewis, Akita, and Sato 2010; Sato and Sato 2001). Teachers in different disciplines within a school use shared principles for analysis of instruction, such as whether a lesson elicits the thinking of all students, enables connections between the academic discipline and real-world issues, and so forth. If teachers collaborate across disciplines, it is important that all participants see the lesson study goals as important to their teaching, not as a “side trip” (Sisk-Hilton 2009) or distraction.

Consider an Outside Specialist

Another element that can greatly enhance lesson study is inclusion of an outside specialist, such as a teacher or researcher, who is highly knowledgeable about the subject matter under study, how to teach it, or both. It is often most effective to involve an outside specialist early on, so that the specialist has a chance to contribute ideas about the direction of the work, suggest curricular resources, and schedule time to serve as a commentator on the research lesson. “A Closer Look” highlights the role of the outside specialist in lesson study.

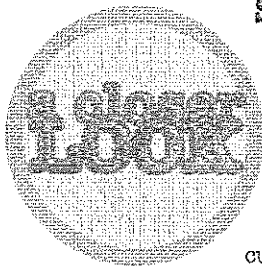
Though not required, an outside specialist may play a crucial role within a school and beyond. If you choose to use an outside specialist, *make sure she understands the collaborative, student-focused nature of lesson study*. You may want to share Figure 1-1 (page 7) with the specialist, in order to highlight the differences between lesson study and traditional expert-led professional development, and you will certainly want to share the guidelines for observation of a research lesson (Figure 5-1, p. 58). In lesson study, the role of the outside specialist is to raise questions, add new perspectives, and be a co-researcher, not to tell others what to do.

A subject matter specialist (from the district or a university) who meets with the lesson study group can help teachers quickly access relevant research, high-quality curriculum examples, and answers to subject matter questions. A subject matter specialist can greatly ease the work of teachers in pinpointing useful materials within the huge variety of purportedly useful Internet and print resources. However, the regular presence of a subject matter specialist (particularly one who quickly jumps in to help, and whom team members look to as an authority) can also keep teachers from doing certain kinds of learning.

Consider an exchange on the DVD “How Many Seats?” Teachers are anticipating student responses to the seats task, and one teacher suggests that students may arrange the triangle tables incorrectly (not in a row). Another teacher asks whether that will make a difference in the mathematical function that relates the seats and tables. They look to Jackie (who serves half-time as a mathematics coach), who responds, “I wonder if it makes a difference. Let’s figure it out.” Teachers then try arranging the triangles incorrectly, as they think students might. When some team members are about to conclude prematurely that the pattern always holds, Jackie makes what may be a crucial intervention, asking the question, “Will that always be true?” When subsequently questioned about their experiences during the lesson study cycle, several teachers commented that the experience of posing and solving a novel mathematics problem

A Closer Look: The Role of Outside Specialists in Japanese Lesson Study

by Tad Watanabe, Kennesaw State University



Professor Kenjo is an experienced mathematics teacher educator at a national university known for preservice teacher education. He is often invited to be an outside commentator on research lessons. He says that, as a rule of thumb, he tries to "praise ten and criticize one." In other words, he selects one (or a few) important ideas to focus on and chooses not to dwell on other areas needing improvement. On those issues, he might say something like, "You have done this very well, but perhaps if you think about these ideas, you might be able to do even better." However, on the issue he selects to focus on, he becomes much more critical and provocative.

Professor Kenjo says that when he is invited to be the outside commentator at an open house or research lesson that is more public in nature, he tries to focus on generalizing the main idea of the research lesson. The research lesson is conducted with a particular group of children with a particular teacher. Not everyone can duplicate what the teacher did. However, the outside commentator must, according to Professor Kenjo, generalize the good practices exemplified in the research lesson to assist the observing teachers to think about adopting the practices in their classrooms.

Occasionally, an outside commentator works more closely with a school or a group of teachers. In those situations, the same commentator will attend a number of research lessons conducted by the school or the group over an extended period of time. For example, Professor Saito has been working with Takuma Elementary School, a public elementary school in Tokyo metropolitan area, for more than a year. After a recent lesson study open house, which was attended by more than two hundred teachers from the Tokyo area and beyond, Professor Saito recalled what initial lesson study meetings were like. He said that during his talk, more than half of the faculty was either asleep or pretended to be. However, the principal and Professor Saito, along with the head of the school lesson study group, persisted. Today, all teachers at the school seem to have found joy and excitement in lesson study. During the two years he has been involved, Professor Saito shared his expertise and was also a cheerleader who encouraged the teachers to keep moving on. He even taught a research lesson himself.

As you can see, an outside specialist can play a number of different roles depending on the particular situation. However, one thing that is common to all effective specialists is that they pay attention to the audience and anticipate what they are ready to learn. An experienced teacher recently told me that an outside specialist is just like a teacher in a classroom. Just as a teacher must assess and act according to what students need, the outside commentator must do the same with the teachers who are attending the lesson study.

* * * * *

by themselves—based on a mistake they thought students might make—felt very significant. As one said, “I felt like we were in charge of our own learning.” Rather than answering the question, Jackie asked challenging questions that allowed team members to solve the question themselves.

There is no right or wrong answer to the question of whether to include a subject matter specialist. A subject matter specialist may quickly access high-quality resources, substantially enhancing teachers' learning during the cycle. On the other hand, with a subject matter specialist present, teachers may have fewer opportunities to learn how to collect and explore resources, consult research, ask for help, and involve content experts without giving away all power to them. There are many intermediate choices between regular participation by a specialist and no participation. For example, some lesson study groups regularly work with subject matter specialists by email during curriculum study and have them visit as commentators at the time of the research lesson. Another possibility is to have a specialist recommend materials once the group has settled on a topic or to use a “lesson study tool kit” designed to support lesson study on a particular topic. Such tool kits have been developed for several topics in mathematics and include, for example, problems for teachers to solve and discuss, tasks to investigate student thinking, and research summaries. (See toolkit examples for mathematics at: www.lessonresearch.net/nsf_toolkit.html and www.lessonresearch.net/FRACTIONTK/fractions_toolkit.html.)

Develop a Shared Understanding of Lesson Study

However your group comes into being, the work of lesson study is likely to feel like a significant paradigm shift. It is important to create a shared vision for the work you are about to undertake. We suggest that you examine and share your ideas about effective professional development, acquaint yourselves with lesson study, and consider how the two fit together. You can do this by revisiting questions 1 to 3 of the “How Many Seats?” viewing guide in Appendix B.

A Learning Stance

Lesson study rests on the assumption that *everyone* takes a learning stance. It will be helpful for every group member—even ones who are coaches or “experts”—to bring genuine questions (not just answers) to the group's work. Lesson study differs from mentoring or coaching in its emphasis on inquiry conducted by equals, and it provides an opportunity for even experts to pose and pursue questions about student thinking.

Shared Ownership and Responsibility

In their work together, group members should come to feel that the lessons are “our” lessons, not “your” lesson or “my” lesson. The point of lesson study is not to polish the skills of a few star teachers but to help all teachers grow and to create the interpersonal relationships, school culture, and personal and collective habits of inquiry that support continuing growth every day. Members view every participant as having something valuable to contribute to the group.

Emphasis on Students, Not the Teacher

Lesson study focuses on student learning and development. It provides a rare and valuable chance for teachers to be in a classroom solely to investigate student learning, unencumbered by the need to manage students or provide instruction. During a class discussion, a first-year U.S. teacher from Mills College (January 16, 2001) pointed out how lesson study differs from the lesson observation familiar to U.S. teachers: "In the United States, if you are being observed, it's a critique of you. Lesson study focuses on student learning, on student ahas. It takes what we're doing to a more professional level."

Agree on Expectations from Group Members

What contributions will you expect from group members? Some lesson study groups form with the understanding that not all members want to teach a research lesson and that no one will be pressured to do so. Others expect all members will take a turn. It makes sense to discuss these expectations up front.

Another important practical step is to define the work roles needed for productive functioning of your group. Typical roles might include:

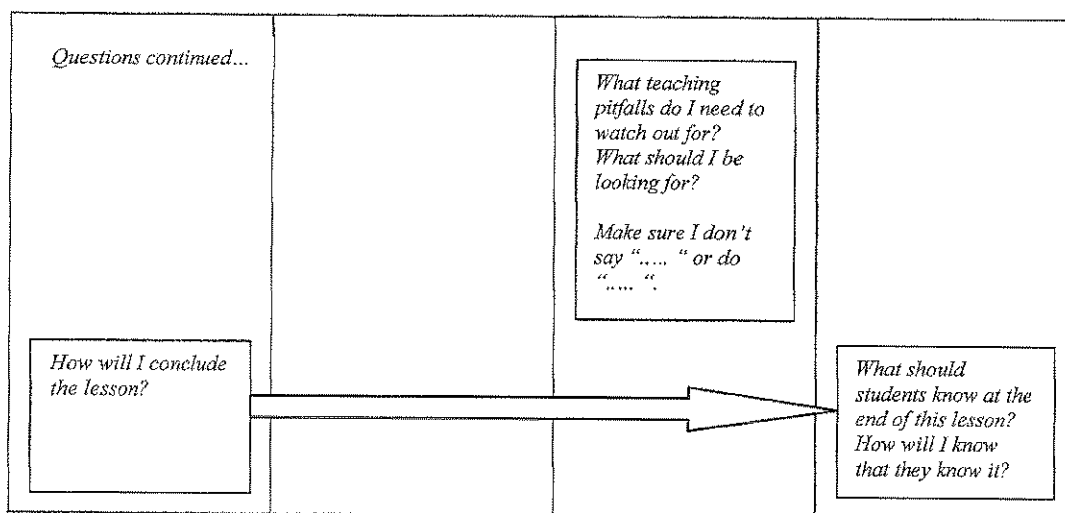
- a facilitator, who leads the group through the agenda, eliciting participation from all group members and actively monitoring the group norms
- a note taker, who records and distributes notes that summarize discussions and capture important decisions
- a recorder, who writes on chart paper or the board information that needs to be kept in public view (e.g., the results of a brainstorm or the sequence of steps in a lesson)
- perhaps a timekeeper or a convener, who reminds the group of upcoming meetings and makes arrangements (room, refreshments, etc.)

Once the lesson plan is under development, it may be useful to add a role: updating and circulating the lesson plan. Some groups have also added the roles of "researcher" (tracking down research as needed) and "summarizer." Taking a work role helps team members feel responsible for the learning of other participants as well as their own learning. (This list of lesson study group roles can also be found in Appendix F.)

Permanent or Rotating Facilitator?

Many lesson study groups have team members rotate roles each meeting, a practice that ensures that team members gain experience with different roles. Another alternative is to have a single designated facilitator throughout the lesson study cycle. The strengths and trade-offs of each choice are probably clear: a single designated facilitator (particularly if trained and given time for the job) may become a very helpful "go-to" person for materials, information, and problem solving, helping the group make steady progress. On the other hand, rotating facilitation may build shared responsibility and leadership among all team members and may give quiet members a chance to build their comfort in leadership roles.

All lesson study tools developed by the Lesson Study Research Group are regularly revised and updated. To download the latest versions of these documents, please go to: www.ic.columbia.edu/lessonstudy/tools.html.



E. Evaluation

Describe your plan for evaluating the success of your lesson overall. Explain what you will look for in your students' in-class behavior and work products to determine if your lesson goals were met. Describe any homework or formal assessment that you plan to use as well. You will also want to be specific about what you are looking to collect information or evidence about with respect to your lesson study goals. You should also outline how you would like observers to assist you in collecting any of this information.

- How will I determine if students understood the concepts taught in this lesson?
- What would be appropriate homework? What will I be able to tell about the student from his homework?
- What information do I want to collect in the course of this lesson?
- Where in my plan would I like some assistance?

F. Appendix

Here you should attach or include copies of materials, handouts etc. that will be used during the lesson. For materials that will be used but cannot be attached (e.g., manipulatives) provide a written description and/or drawing. You should also include any materials that you have made specifically for the observers to use (e.g., observation tools, seating charts, etc.). This appendix is invaluable for observers to acquaint themselves with your lesson prior to entering your classroom. The more familiar they are with what is meant to transpire, and what you want them to focus on during their observation, the better they will be able to provide you with useful feedback.

Sample Study Lesson Plan Format

Logistical information

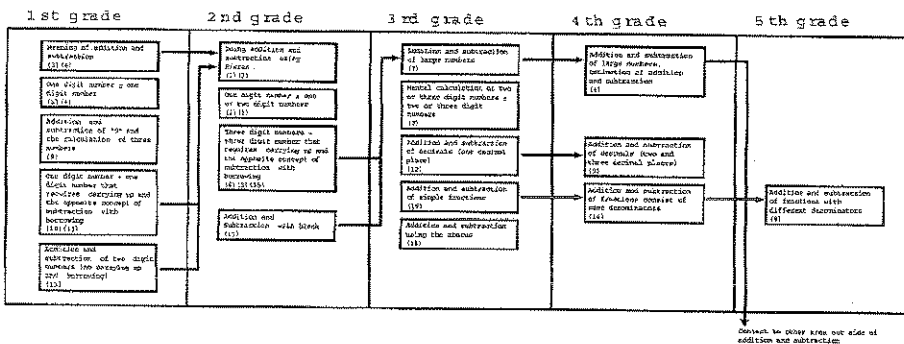
Date:
Grade:
Period and Location:
Instructor:

Name of the unit: (e.g., "Finding areas of geometric figures")

I. Plan of the unit

A. Goal(s) of the unit: (i.e., describe/ list goals of the unit here)

B. How this unit is related to the curriculum:



C. Instructional sequence for the unit:

1. Phase I (e.g., How to find area of quadrilateral).... 2 lessons
2. Phase II (e.g., How to find area of right triangles).. 2 lessons (this is lesson I of 2)
3. Phase III..... # of lessons
4. Phase IV..... # of lessons

Name of the study lesson: (e.g., "Finding the formula for area of a triangle")

II. Plan of the study lesson

A. Goal(s) of the study lesson: (i.e., describe/ list the goals of the study lesson here)

B. How this study lesson is related to the lesson study goal: (i.e., a few descriptive paragraphs)

C. Process of the study lesson:

Steps of the lesson: learning activities and key questions	Student activities and expected reactions/ responses	Teacher's response to student reactions/ Things to remember	Method(s) of evaluation
<p><i>This chart represents the bulk of the lesson plan, and often spans a number of pages. It is usually laid out in order by the parts of the lesson (e.g., introduction, presentation of problem, student work, student presentation, summary, etc.), and also includes the allocation of time for each of these parts.</i></p>			

D. Evaluation

Example of a “gap” that could be selected, and its development into a goal:

1. *I want my students to be curious about mathematics. They should not see mathematics as something that they are forced to learn in school, but otherwise have no interest in. I want them to realize that mathematics is inherently interesting and I want them to be motivated to learn mathematics not only in school, but also from their peers and their environment.*

2. *I have noticed that my students don't seem to care about mathematics. They have no apparent curiosity about numbers or what they could mean. They don't ask questions, or really want to discover the answers to questions that I pose to them.*

3. *The lack of student curiosity about mathematics.*

4. *To develop students who are curious about mathematics, and who will engage in mathematics to satisfy their curiosities.*

All lesson study tools developed by the Lesson Study Research Group are regularly revised and updated. To download the latest versions of these documents, please go to: www.tc.columbia.edu/lessonstudy/tools.html.

A Tool for Planning and Describing Study Lessons¹

I. Background information

- A. Goal of the Lesson Study Group:
- B. Narrative Overview of Background Information:

II. Unit Information

- A. Name of the unit:
- B. Goal(s) of the unit:
- C. How this unit is related to the curriculum:
- D. Instructional sequence for the unit:

III. Lesson Information

- A. Name of the study lesson:
- B. Goal(s) of the study lesson:
- C. How this study lesson is related to the lesson study goal:
- D. Process of the study lesson:

Steps of the lesson: learning activities and key questions (and time allocation)	Student activities/ expected student reactions or responses	Teacher's response to student reactions / Things to remember	Goals and Method(s) of evaluation

E. Evaluation

F. Appendix

¹Aspects of this tool were derived from lesson plans provided by Makoto Yoshida of Global Education Resources, L.L.C (myoshida@globaledresources.com), and by the Greenwich Japanese School, CT. In addition, a number of the planning questions suggested in this document were developed by Dr. Fritz Staub and Lucy West, under the auspices of the Learning Research and Development Center, University of Pittsburgh, and Community School District 2, New York City.

A Tool for Planning and Describing Study Lessons

This tool is designed to help you describe your study lesson. It is organized by sections, each focusing on a particular aspect of the lesson or its context. Each section contains a list of guiding questions you should think about as you complete that section. To make your work efficient, we recommend that you use this tool to guide your lesson planning process. Keep in mind that the list of questions that we provide is not meant to be comprehensive, but rather, to give you an idea of key issues that you should be thinking about. Many other questions or issues are likely to surface as your group plans its study lesson. These issues should also be incorporated into the appropriate section of your study lesson description.

Logistical information about the lesson

Date:

Grade:

Period and Location:

Instructor:

I. Background information

A. Goal of the Lesson Study Group:

This is a description of the group's lesson study goal and its focus. This goal will have evolved out of identifying the gap that exists between aspirations your group has for students and the kinds of learners that are actually being fostered at your school. Therefore, you may want to describe in this section: the aspirations that your group has for students and why they are important; ways in which, as a group, you feel you are falling short of these aspirations and how this is manifested in your students; how the goal your group has chosen represents an attempt to close this gap. You may also want to explain concretely what your exploration of this goal entails.

- *What kind of learners do we want to see develop at our school?*
- *What kinds of learners are actually developing at our school? What evidence do we have for this?*
- *Why does this gap between our aspirations and reality exist? How can we close this gap?*
- *How will the lesson study goal we have chosen help us close this gap?*
- *How will we go about exploring our lesson study goal?*

Note: although all the study lessons planned by your group will describe this same group goal, it is helpful for you and your planning group to write your own version of the above section.

B. Narrative Overview of Background Information:

This is a description of the lesson context. It is a way for you to set up and put in perspective the lesson. You should include all the background information that you feel is needed to appreciate the lesson in a meaningful way. For example, you may want to provide information regarding your students, what they know, and why this lesson is important to their continued learning and development. You may also want to mention any teaching techniques or approaches that you will be exploring in this lesson. Make this personal to you as the teacher, your classroom, and your individual students.

- *What do the observers need to know about my classroom?*
- *Who are my students? What do they already know? What strategies do they use? What motivates them?*
- *What personal knowledge can I share with the observers so that they may better understand what is going on with my individual students? What individual differences will they see?*

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- Why is this mathematics important?
- What misconceptions might students have?
- What should students know at the end of this lesson? What else would I like them to gain from this lesson?
- What do I think I can achieve in this lesson?
- Are there any teaching techniques or approaches that are central to the design of this lesson?

II. Unit Information

A. **Name of the unit:** State the name of the unit from which you have selected your study lesson.

B. **Goal(s) of the unit:**

This is a description of the learning goals for the unit.

- What is the mathematics here?
- What should the students know at the end of this unit?

C. **How this unit is related to the curriculum:**

This is a description of how the content that is taught in this unit relates to content taught in previous and future grades as well as this grade. It should include the specific concepts that are taught in those grades, and how they relate to the concepts taught in this unit. A curriculum guide may provide you with this information, but take some time to think about how everything relates, and the importance of an appropriate development of concepts. So that this task does not become unwieldy, include only highly relevant concepts in this description.

- What prior knowledge is necessary (to learn the content that this unit focuses on)?
- What new knowledge can be developed from the concepts that students will learn in this unit?

D. **Instructional sequence for the unit:**

This is a sequenced description of the general objectives of the unit. It should identify how the study lesson being described fits within the sequence. It does not need to list each individual lesson, but rather, the topics that are covered, and the number of lessons spent covering each topic.

- Where does this lesson fall in this unit and why?
- Do any of the lesson concepts and/or skills get addressed at other points in the unit?

III. Lesson Information

A. **Name of the study lesson:** State the name of the study lesson being described.

B. **Goal(s) of the study lesson:**

This is a description of the goals for this lesson. You may also want to include specific strategies, skills, or ways of thinking about mathematics you would like to address.

- What is the mathematics here?
- What should students know at the end of this lesson?
- Are there specific strategies being developed?

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C. How this study lesson is related to the lesson study goal:

This is a description of the specific aspect(s) of the group lesson study goal that you would like to focus on during this lesson. In this section you will want to relate your instructional choices for this lesson to the group lesson study goal.

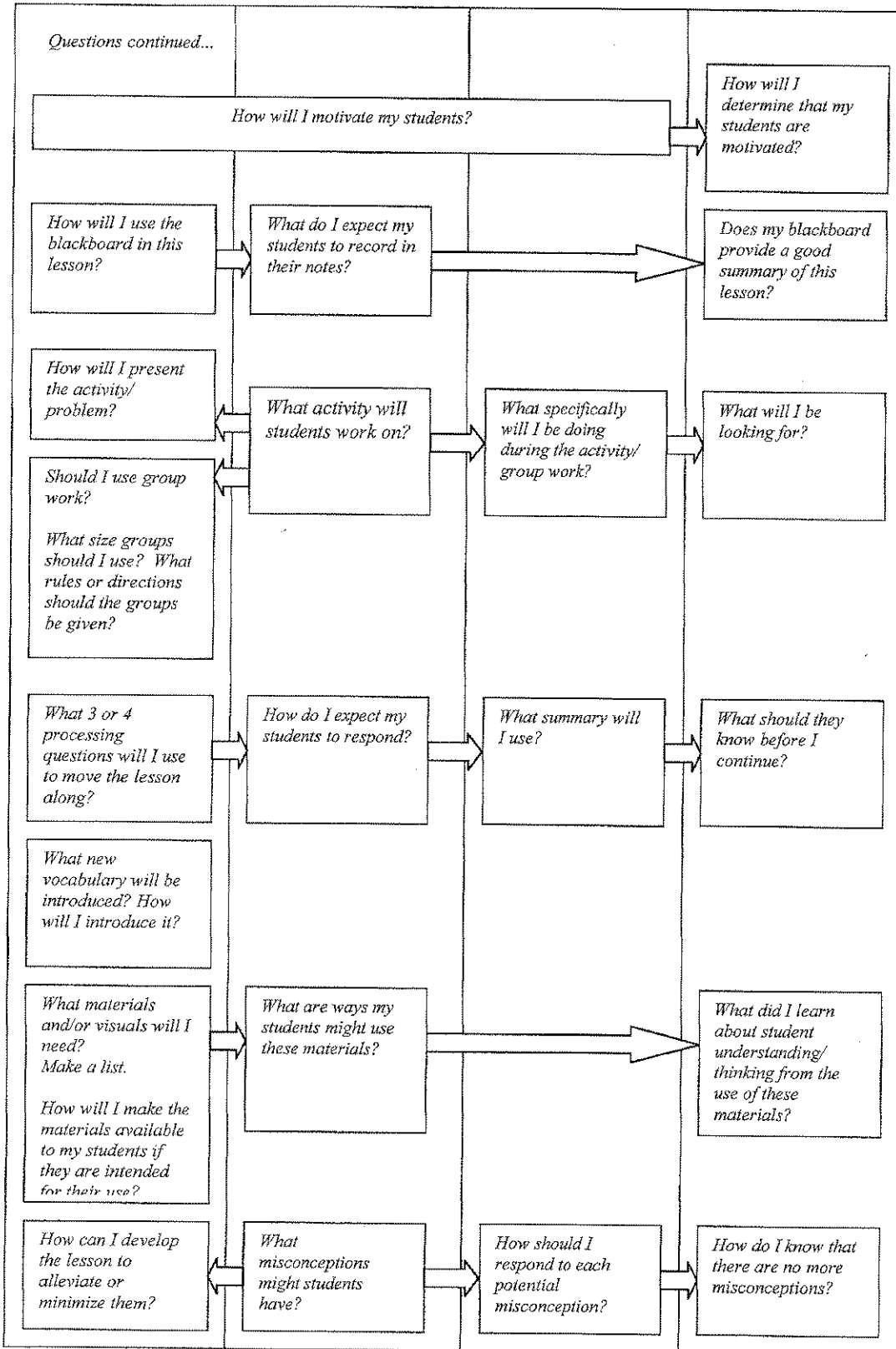
- How will I explore our groups' lesson study goal through this lesson?
- What aspects of my lesson will address the groups' lesson study goal? In what ways?

D. Process of the study lesson:

This is a chart of the planned lesson sequence. It represents the bulk of the lesson plan, and often spans a number of pages. It describes what you have planned and expect to happen from the beginning of the lesson until the end.

Steps of the lesson: learning activities and key questions (and time allocation)	Student activities/ expected student reactions or responses	Teacher's response to student reactions / Things to remember	Goals and Method(s) of evaluation
<p><i>This column is usually laid out in order by the parts of the lesson (e.g., launch, investigation, congress, extension/applications, etc.), and also includes the allocation of time for each of these parts.</i></p> <p><i>This column should also include a description of key questions or activities that are intended to move the lesson from one point to another.</i></p>	<p><i>This column describes what students will be doing during the lesson, and their anticipated reactions or responses to questions/problems you will present.</i></p>	<p><i>This column describes things that you want to remember to do/not to do within the lesson as well as other reminders to yourself.</i></p> <p><i>Also, as you have anticipated student responses and reactions (previous column), this column provides a place where you can think through how you might use those responses and reactions in synthesizing a true learning experience within your classroom.</i></p>	<p><i>This column describes the goals that are being focused upon during each part of the lesson, and for each activity/problem.</i></p> <p><i>It should also include a concrete description of how you will determine that you have achieved each of these goals.</i></p>
<p><i>Guiding questions</i></p> <div data-bbox="228 1541 451 1696" style="border: 1px solid black; padding: 5px;"> <p><i>How should this lesson progress? (How much time should I spend?)</i></p> </div>	<div data-bbox="493 1541 711 1696" style="border: 1px solid black; padding: 5px;"> <p><i>What do I expect of my students? How will they respond?</i></p> </div>	<div data-bbox="776 1541 993 1696" style="border: 1px solid black; padding: 5px;"> <p><i>Is there anything specific I want to remember to do? Any reminders for my students?</i></p> </div>	<div data-bbox="1036 1541 1253 1696" style="border: 1px solid black; padding: 5px;"> <p><i>What should I look for to know that my goal(s) have been achieved?</i></p> </div>

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Lesson Study Protocol

The following protocol guidelines are meant to facilitate the lesson observation and debriefing process. Although these guidelines are meant to make these activities more constructive and efficiently organized, they are not meant to minimize the critical or reflective nature of the feedback session¹.

❖ Observing the lesson:

1. The observers, including the teachers who helped plan the lesson, should NOT interfere with the natural process of the lesson (e.g., by helping students with a problem). However, observers are permitted to circulate around the classroom during seatwork, as well as communicate with students for clarifying purposes only (e.g., if they could not clearly hear what a student was saying). Otherwise, observers should stand to the back and sides of the classroom.
2. It is a good idea for observers to note their observations on the lesson plan itself. This procedure will not only help observers focus on the goals and activities of the lesson, but also help them organize their feedback for later.
3. It is also a good idea for observers to distribute observations among themselves. For example, a few clusters of observers could watch assigned groups of students, another observer (usually one of the planning teachers) could keep time, etc. The teacher should also prepare for this observation by distributing seating charts among the observers (if seating charts are not available, s/he could place nametags on each student), so that observers can conveniently refer to the children by name when discussing their observations and sharing their feedback.

❖ Preparing for the feedback session:

1. Instead of discussing the lesson immediately after it has been taught, the entire group should take a break to relax and gather their thoughts.
2. The group who planned the lesson should assign roles among themselves in order to help keep the discussion focused and on track. These roles include: moderator/ facilitator (usually a member of the planning group besides the teacher who taught the lesson), timekeeper, and recorder(s).
3. The teachers who planned the lesson should sit together at the front of the room in panel formation during the feedback session. The purpose of this setup is to emphasize the idea that the entire group (not just the teacher who taught the lesson) is receiving the feedback.

¹ Some of the suggestions described in this document were modeled by Japanese teachers at the Greenwich Japanese School, CT, and are also based on our work with U.S. teachers at Public School #2 in Paterson, NJ and at Community School District #2 in New York City.

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To download latest versions of these documents, please go to: www.tc.columbia.edu/lessonstudy/tools.html.*

❖ **Suggestions for sharing feedback about the lessons:**

1. The moderator/ facilitator should begin the feedback session by (1) outlining the agenda for the discussion (e.g., “first we will hear from the teachers who planned the lesson, and then...”); and by (2) *briefly* introducing the goals of the planning group.
2. The teacher who taught the lesson should have the first opportunity to comment on his/ her reactions to the lesson, followed by the other planning group members. S/he should address what actually occurred during the lesson (e.g., what worked, what did not work, what could be changed about the lesson, etc.).
3. The planning teachers should also raise questions/ issues that were raised during the planning sessions, and describe how these concerns were addressed by the instructional decisions they made for the study lesson. If the feedback session is after the second implementation of a study lesson, the planning members should clarify what changes were made between the two lessons, and how these changes related to the goals of the lesson.
4. The planning teachers should direct the observers to give them feedback that is related to the goals of the lesson. The observers can then share feedback about the lesson that helps the planning teachers address these goals. For example, observers could share their suggestions about how they might have done something differently in their own classes. Or, they could ask the planning teachers about their rationales for making certain decisions about the lesson (e.g., “Why did you choose those numbers for that problem?”).
5. When observers share their feedback, they should begin on a positive note by thanking the teacher who taught the lesson and discussing what they liked about the lesson. Observers should then share critical feedback by supporting their statements with concrete evidence. For example, they could comment on specific observations from this particular lesson (e.g., “I saw student X do this...”), or make suggestions that draw upon their own experiences (e.g., “When I taught a similar lesson, I did (blank) differently because...”).
6. Each observer should comment on a specific aspect of the lesson, and then give other observers the opportunity to comment on this point or related aspects of the lesson. This procedure prevents the feedback session from becoming dominated by one observer, and allows others to share their insights. If an observer would like to share something that is not being discussed at that point, s/he can write it down for later.
7. Similarly, the teacher(s) who planned/ taught the lesson should wait until a few comments about a particular aspect of a lesson have been received before responding to the observers. This waiting etiquette prevents the discussion from becoming a point-volleying session, and allows all participants to voice and absorb the feedback in a reflective manner. In addition, the moderator should be responsible for proactively keeping the debriefing session on track.
8. The timekeeper should remind the group when time is running short, so that the group can meaningfully wrap up their debriefing session. If an outside advisor is present, the feedback session should end with general comments from that person.