A Practical Guide to Translating Lesson Study For a U.S. Setting

The authors describe a process for creating deep and grounded reflection about the complex activities of teaching that can then be shared and discussed with other members of the profession.

BY CLEA FERNANDEZ AND SONAL CHOKSHI

LESSON study (jyoukenkyuu) is a Japanese professional development process that enables teachers to systematically examine their practice in order to become more effective instructors. In recent years, researchers have argued that lesson study is a promising approach for improving teaching in the U.S., and, as a result, today we can document a widespread growth of lesson study efforts in American schools. However, since there are limited descriptions of how to actually translate the basics of lesson study for a U.S. context, we wrote this article to provide U.S. educators with concrete ideas for structuring, organizing, and implementing lesson study in their schools.

A BRIEF OVERVIEW OF THE LESSON STUDY PROCESS

Before we share our recommendations, we would like to outline the main features of lesson study that we refer to throughout this article.

Lesson study can bring together teachers from one school or from various schools. Teachers begin the lesson study process by identifying an overarching goal that they would all like to achieve with their students. Then, by working collaboratively on a small number of "study lessons," the teachers examine how to tailor their teaching in ways that will help achieve the group's selected goal.

Working on these study lessons involves several steps, the first of which is for the teachers to jointly plan a lesson and draw up a detailed lesson plan for it. The next step is for one of the teachers in the group to teach the lesson in a classroom while the others observe. Next, group members come together to discuss their observations of the lesson and to reflect on what it taught them about the goal they set out to explore. Often, the group will choose to revise the lesson plan and have another group member reteach the lesson in another classroom, while the group members again observe. A debriefing meeting in which observations and insights are discussed once again follows this process.

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Illustration: Artville Collection
lic demonstration lesson.

At the end of this process, the teachers produce a record of their lesson study work by writing a reflective report. A group may also periodically hold an open house, where teachers can share their lesson study work with other teachers and with other school staffs by teaching study lessons and discussing them with the invited guests.

As you read our suggestions for successfully implementing and learning from lesson study, please keep in mind that the advice we provide here is meant to be more suggestive than prescriptive. We do not believe that there can be a “one-size-fits-all” approach for integrating lesson study into the U.S. educational landscape. Instead, we encourage creative experimentation with lesson study that allows teachers to engage in high-quality learning experiences. With that first piece of advice in mind, here are our suggestions for conducting lesson study.

> ADVICE FOR SETTING UP LESSON STUDY

1. **Select an overarching goal to focus and direct lesson study work.** A key step in setting up your lesson study group is to choose a specific goal you want to explore through your work on the lessons. This goal will focus and direct your work by providing you with a research question for your group to answer. For example, if you select as your group’s goal “to develop students who are critical thinkers,” you can plan all your lessons with an eye to answering the question: “How does one create and teach lessons that encourage students to think critically?”

   A lesson study group might select an overarching goal the way that many Japanese teachers do. They begin by identifying the gaps that they see between the kinds of children they want to nurture and the kinds of students that are actually growing up in their school. The teachers collectively discuss the weaknesses they see in their students, conduct observations in one another’s classrooms, interview students, look at past test scores, or create special assessments to determine student weaknesses. After identifying these weak areas, the teachers select a goal that will help them move closer to their aspirations for their students. For example, if teachers at a particular school have noticed that their students have become complacent, nonindependent problem solvers, these teachers might choose as their goal “to foster students who are autonomous problem solvers.”

   This approach to selecting an overarching goal will provide your group with broad and important objectives that arise from the needs of your students and that are also likely to be interesting to all the teachers in your group. We suggest that your work on such goals be conceived as a three- to four-year effort, so that your group has sufficient time to obtain meaningful results and insights. Furthermore, each year you can build on the experiences of the previous year while also taking a different, yet complementary, perspective on your goal. For example, in the case of exploring how to foster critical thinkers, a first year might be devoted to thinking about how to select and present students with tasks that encourage critical thinking. A second year could be devoted to investigating how to support classroom discussions in which students present ideas and argue with one another about the individual merits of these ideas.

2. **Create a structure to facilitate the smooth functioning of lesson study.** If your group involves more than a handful of teachers, you can more effectively plan study lessons together by dividing the large group into smaller planning subgroups. These subgroups generally consist of four to six teachers. If your overall group spans grade levels, creating subgroups according to the same or similar grade levels might also make it easier for teachers to contribute to the planning of study lessons.

   In order to prevent this subgroup structure from making the work of your whole lesson study group disconnected, you can periodically schedule time for the subgroups to share their ongoing efforts with one another. These scheduled exchanges will allow each subgroup to consider its own lessons from as broad a perspective as possible and will also allow the work of each subgroup to inform that of the others. Another critical way to ensure that opportunities for learning from this experience are not diluted by the subgroup structure is to expect all the teachers to observe and discuss the lessons implemented by each subgroup.

3. **Strategically schedule the main activities of lesson study.** Since lesson study involves time-consuming work, you can reconcile these demands with your many other commitments through strategic scheduling. In order to conduct high-quality work without becoming overwhelmed, you could schedule each of your lesson-planning subgroups to work on two or perhaps three study lessons per year, each of which will be taught twice. We generally recommend that you do not revise and reteach a lesson more than once, since work-
ing on the same lesson is likely to yield diminishing returns for the quality of the learning experiences.

Furthermore, we propose that a three- to four-week period be devoted to working on any of these lessons. Limiting the length of this work to a few weeks will allow for the same study lesson to be taught in two different classrooms without creating major complications related to withholding a lesson from a group of students for a long period of time. It will also prevent teachers from extending their planning so long that it becomes repetitive or interferes with the other powerful elements of lesson study, such as the group lesson observation and its debriefing.

Committing to this level of activity will also allow your lesson study group to employ a staggered schedule so that all the subgroups are not working on study lessons at the same time. After a three- to four-week period of work, a subgroup can shift to supporting the other subgroups whose turn for intensive work has come. Think of this shift as subgroups passing the “lesson study baton.” This strategy can quickly generate a strong base of lesson study activity at a school without overburdening individual group members.

A useful way to create such a schedule is for all the members of your group to come together at the beginning of the year to strategically plan when it is most realistic for each subgroup to work on its lessons. For example, certain subgroups may purposely steer clear of periods when testing or parent/teacher conferences are scheduled.

4. Choose appropriate study lessons to work on. Since each lesson study group will work on a limited number of lessons in a year, it is important to select lessons carefully, so that they can support productive discussions. The following selection criteria will help with the choice of such rich lessons.

The first criterion is that the lesson be appropriate for exploring the research question that your group has chosen to focus on. For example, some lessons may be more useful than others for learning how to promote critical thinking in the classroom. Another selection criterion is to choose a lesson that addresses critical content standards for student learning. Such lessons are more likely to be relevant to a wider group of teachers, since the topics they cover will have antecedents in earlier grades and will be developed in later grades. Similarly, you might consider selecting a lesson that is reputed to be difficult to teach or one that is “boring” for students, because the members of your group are likely to benefit from examining such a lesson together. Lessons that introduce a new concept to students are also excellent candidates, since these are often particularly challenging and are crucial for anchoring student learning. However, even a “practice” lesson, in which students apply newly learned concepts, can be the focus of a lesson study if the teachers are interested in investigating issues that tend to emerge from such lessons.

**STRATEGIES FOR WORKING ON STUDY LESSONS**

1. Use a lesson plan format that supports the lesson study process. Drawing up a lesson plan is essential for conducting effective lesson study. Although Japanese teachers use various planning formats for lesson study, all such formats tend to be detailed (often multiple pages in length) and share certain common components. First, the plans usually explain the teaching strategies being explored, along with how they relate to the lesson study goal that is driving the group’s work. Second, the plans provide background information about the students who will take part in the lessons: their achievement levels, the kinds of learners they are, what they know about the topic, and what the teacher hopes to achieve with them during the lesson. Third, the plans situate the lesson within a unit of instruction and the curriculum at large, so that the lesson can be interpreted in the broader context of children’s past and future learning experiences. Fourth, the plans include clear methods and questions for assessing whether or not the overall goals of the lesson were achieved.

In describing the activities of the lesson itself, Japanese teachers often use a four-column chart. The first column outlines the “steps of the lesson,” which are the sequence of tasks and key questions that the teacher has planned. The next column predicts the range of student responses and the reactions that the teacher expects for each step of the lesson. The third column lists ways the teacher might deal with student responses (e.g., what comments she will make or questions she will ask in return, or how she plans to relate the responses to the ideas she wants children to think about during the lesson). This third column often lists points for the teacher to remember, as well, such as a reminder about why a task was included in the lesson or what the teachers are working toward. Finally, the last column lists methods of evaluation for determining the success of each step in the lesson. For example, if the first five minutes of a lesson are designed to motivate
and engage the children in the lesson, this final column might suggest ideas for assessing whether this segment of the lesson is achieving its goals.

We encourage your group to consider drawing up similarly detailed lesson plans because we believe this format provides a rich framework for guiding your lesson study process. The lesson plans not only provide blueprints for the teachers who will teach the lessons but also provide powerful communication tools that allow subgroups to stay abreast of one another’s work and to give one another rich feedback. An observer would use a lesson plan to investigate how the intentions and goals conveyed in it compare to the way the lesson actually played out. A plan also helps contextualize the study lesson (i.e., within the curriculum, within the unit, within the goals of the lesson study), so that it cannot be interpreted as an isolated lesson that is disconnected from the realities of the school, its students, and their learning experiences. Finally, the lesson plan format supports a group’s overall investigation of its chosen research question: 1) it outlines the hypothesis or investigative question (the goal of the lesson); 2) it provides a framework and guidelines for gathering evidence (observations during the lesson); and 3) it facilitates the interpretation of that evidence (during post-lesson discussions).

2. Make the most of limited meeting times. No matter how clever your group is at scheduling meetings, time will most likely still feel like a rare commodity. There are a number of strategies to help make the available meeting times as efficient and productive as possible. First, much of the work — especially planning the finer details of the lesson and actually writing the lesson plan — can be done outside the group meetings. In particular, we recommend that the two teachers who will be teaching the lesson take the lead in writing drafts of the lesson plan. The actual meeting time can then be reserved for discussing and exchanging feedback on these evolving drafts. To prevent unwieldy discussions, you may want to focus on a few key points or critical issues in the lesson and then allow the two “teaching” teachers to work out the remaining details. In fact, the teacher who will be teaching the lesson can serve as the facilitator for each of these planning meetings, so that he or she can help keep the discussions focused and the meetings on task.

Similarly, when the entire lesson study group meets to exchange feedback across subgroups, copies of each subgroup’s lesson plans should be distributed to everyone beforehand. These lesson plans do not have to be final versions, since they will be continually modified at each point of the lesson study process. In order to ensure constructive feedback, the planning subgroups can direct the other teachers to give them feedback about a few specific points or issues of concern (instead of talking about the entire lesson plan); however, this focus should not prevent teachers from reacting to other relevant elements of the proposed plans.

3. Facilitate collaborative lesson planning. A general principle for productively planning lessons together is to never lose sight of the goals of lesson study and of the lesson being planned. Keep asking yourself, “What is our goal here?” “What are we trying to learn about?” “What do we want our students to do?” If you do so, your group will remain focused and coherent in its work.

Nevertheless, it may seem unrealistic to expect that four to six teachers, who most likely have different teaching styles and educational philosophies, will engage in a smooth lesson-planning process. Although this collaboration is meant to be an enriching experience, one can also imagine it becoming frustrating. To avoid disputes and endless debates over how to make a decision about a particular issue, we suggest the following rule of thumb: the teacher who will be teaching the lesson will have the deciding vote. We also encourage you to resolve your disagreements by using the study lessons as a way to experiment with your differing ideas (e.g., use one method for the first version of the lesson and another for the second version, or have different materials available to students and see which materials work better). This approach will help prevent lengthy discussions about the pros and cons of a given idea and will force your group to evaluate ideas according to actual evidence from a specific classroom — where the richness of lesson study lies.

Another way of resolving a dispute about how to teach something would be to survey other teachers and ask them what they have done about a similar issue. Your group could then use the results of this informal survey to decide how to plan a particular segment of the lesson. You could also have a few teachers from your group try out the study lesson (or aspects of it) informally in their own classrooms a few days before the planning meetings. In this way, these teachers can inform the planning group about specific aspects of the lesson, such as “how long students took to do part A.” This strategy is similar to conducting multiple implementations of the same lesson, but it is less formal and can focus directly on specific
facets of a lesson.

Still another strategy for facilitating richer, more concrete planning discussions is to reserve more planning time after the study lesson has been tried out for the first time. This tactic allows the group to come back to the revision process with more specific observations to consider. Consequently, these second planning discussions will be more productive, since you will be less likely to get caught up in hypothetical “what if” planning debates.

4. Carefully observe study lessons. The key to observing a study lesson in the classroom is to consider this activity as a data-gathering opportunity that can help answer questions of interest for the teachers who planned the lesson and for your lesson study group as a whole. Therefore, an important rule of thumb for observing teachers is to refrain from interfering with the natural process of the lesson (e.g., by helping students); otherwise, the information gathered would not validly reflect what would have happened had a lesson been taught by a single teacher.

Moreover, since the lesson plan conveys what those who planned the lesson were trying to learn from it, it would be wise to use this document as an observation tool that provides guidance about what to attend to as an observer. For example, if the lesson plan explains why and how a lesson was planned (e.g., to investigate the use of the chalkboard for helping students present their solutions more clearly), then observers should concentrate the majority of their observations on this aspect of the lesson. Nevertheless, these guiding points are not meant to narrow the observation; instead, they prevent it from becoming disjointed and unfocused.

Another way to focus lesson study observations is to create tools that facilitate data collection. The lesson plan itself can serve as a ready-made tool on which observations can be recorded directly as the lesson unfolds, and this recording can be facilitated by leaving extra space on the lesson plan for observers to note their observations and comments. Other tools might include a seating chart on which students’ solution strategies can be recorded or a template that can be used to keep track of certain key aspects of the lesson.

We also suggest that you take advantage of the communal aspect of the lesson study observation to maximize your group’s data collection. Since there will be multiple teachers observing the lesson, you could distribute yourselves around the classroom in order to see the lesson from different vantage points and gather as much information as possible. For example, different teachers could be assigned to observe different groups of students. Other observers could be responsible for keeping a verbatim record of all questions asked by students, for keeping track of the time allocated to each segment of the lesson, or for recording the information presented on the chalkboard.

Finally, some lesson study groups have wondered whether videotaping a lesson can be a sufficient substitute for actual observation. Although videotaping the lesson provides a permanent record of the events that took place in the classroom, this record is limited in its ability to capture multiple vantage points. The power of having numerous observers in the classroom is that they can see the lesson through many eyes, whereas a video camera provides only a single set of eyes. One possible solution to this limitation would be to have multiple cameras, which capture different elements of the lesson (e.g., student work only, chalkboard only, teacher/student interactions). Since such an arrangement can be complicated and expensive, lesson study groups should rely on live in-class observations.

5. Exchange effective feedback about the study lessons. Learning how to have an honest and productive discussion about a lesson that a colleague has agreed to teach is challenging, but it can be made easier if your group devotes time to adapting and adhering to protocols for exchanging feedback. The goal of a discussion protocol is to formalize procedures that minimize the nervousness and potential for hurt feelings that such feedback activity can provoke. Such a protocol, however, is not meant to make the feedback less reflective or less critical; instead, it is meant to help make the process more constructive and efficient. Although some of the guidelines for providing feedback that we suggest below may seem intuitively obvious, we believe they cannot be emphasized enough because it is very easy to forget them in the heat of a discussion.

First, it is a good idea for members of the planning subgroup to assign roles among themselves for the feedback discussions, such as timekeeper, recorder, and moderator (the moderator should be a member of the planning subgroup, but not the teacher who taught the lesson). This moderator would be responsible for keeping the discussion on track and for managing the key shifts in the debriefing process, which are described below. Before even beginning the lesson debriefing, the observers should take a short break to relax, review their observation notes, and collect their thoughts. When
The feedback session begins, the teachers who planned the lesson should sit together at the front of the room in panel formation. 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.

The moderator should then begin the feedback session by outlining the agenda for the discussion and briefly introducing the goals of the planning group. The teacher who taught the lesson would then have the first opportunity to comment about the lesson, followed by the other members of the planning group. The “teaching” teacher should address what actually occurred in the lesson (what worked, what did not work, what needs to be changed about the lesson, and so on). For the feedback session that takes place 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. Finally, the planning teachers should direct the observers to give them feedback that addresses their questions or issues that are related to the goals of their lesson.

When the observers begin to share their feedback, they should first thank the teacher who taught the lesson and comment on some of the positive aspects of the lesson. The observing teachers should support all their statements with concrete evidence from their observations. Whenever applicable, they should make suggestions that draw from their own teaching experiences (e.g., “When I taught a similar lesson, I did X differently because . . .”). Observers are not offering platitudes but personal opinions grounded in concrete evidence. Observers can also help facilitate a rich feedback session by asking the planning teachers about their reasons for making certain decisions about the lesson (e.g., “Why did you choose those numbers for that problem?”).

Furthermore, each observer should not comment on too many aspects of the lesson at once, so that other observers have an opportunity to share their insights on similar or related aspects of the lesson. This procedure prevents one observer from dominating the feedback session and allows everyone to share insights. Similarly, the planning teachers should not respond to each individual observer as the comments arise; instead, they should wait until a few points of feedback have been received before responding to the observers. This waiting etiquette prevents the discussion from becoming a (defensive) session in which each point raised is countered, and it allows all participants to voice and absorb the feedback in a reflective manner. Finally, the moderator should keep the debriefing on track. The timekeeper should also remind the group periodically about available time, so that there is time for a meaningful wrap-up of the discussion. If an outside advisor is present, the feedback session should end with general comments from that person.

**OTHER CONSIDERATIONS FOR YOUR LESSON STUDY**

1. **Create records of your work.** We strongly suggest that lesson study groups produce reports about their lesson study work, as Japanese teachers do. The purpose of these reports is to provide a reflective record of the work that a group engaged in, so that it can be shared with others and can serve as a future reference tool. The lesson plans alone will not do justice to your group’s thinking and learning process, so we suggest that in your reports you attempt to trace and document the problems that you tackled and the discussions that you engaged in throughout your entire lesson study. However, since there are a great number of issues that could be described, you should identify the focal themes that gave direction to your lesson study and then discuss the development of these themes throughout your entire lesson study process.

   The information in your report can be provided in the form of narrative text, bulleted points, or charts — as long as the discussion points are concise and clear to another person who reads the report. In addition to including copies of your group’s lesson plans, you might want to provide lesson materials (handouts, manipulatives used, and so on), observation notes, and samples of student work. Since the report writing will require each subgroup to draw on extensive notes from the discussions, it is a good idea to assign one or two members of each subgroup to be “recorders” during all of the planning discussions and debriefing meetings.

   In Japan, lesson study reports are often published in the form of monographs or research articles, and major bookstores overflow with them. In fact, Japanese teachers are responsible for about two-thirds of such publications, thus producing more research articles than do researchers. One could imagine such reports becoming the basis for a treasury of professional knowledge that could be shared by teachers all over the U.S. At some point, U.S. lesson study groups could
even document their work through a multimedia database that could be accessed by others.8

2. **Overcome the inherent limitations of your lesson study group.** The power of lesson study rests in the old adage that two heads — in this case many heads — are better than one. However, the work of any lesson study group will be limited by the collective wisdom of its group members. What happens when the content knowledge of the group is not that strong? Or when all the teachers in the group are relatively new to the profession? Or when all the group members hold very traditional views of teaching? To overcome these unavoidable limitations, we strongly recommend that you consciously infuse your work with a variety of expertise, content knowledge, and new reform ideas from outside your school. We suggest two ways of accessing this information.

The first way in which your group can inject key information or fresh perspectives into its work is by inviting an “outside advisor” to visit your group occasionally and provide support. This person might be a university professor, a district staff developer, a content expert, or a well-known educator or reformer. The advisor would attend key lesson study meetings and especially be invited on days when study lessons are to be implemented and discussed. The outside advisor can thus enrich the work of your group, while your group still maintains control of the lesson study work.

A second way in which your lesson study group can infuse its work with multiple perspectives is by holding an open house. For this one-day event, your group would teach and discuss a few study lessons with invited guests — usually teachers and administrators from neighboring schools. In addition to sharing copies of lesson plans, you could distribute a brochure that describes your school and a report about the ongoing lesson study work. Finally, the outside advisor could comment on the lessons presented and perhaps place them in a broader perspective. We recommend holding such an open house after a couple of years of working on the same goal, so that your group will have a rich body of work and insights to share.

3. **Keep lesson study work principled.** In parting, we would like to remind our readers not to lose sight of the hallmarks of lesson study, so that the lesson study work they engage in remains principled. First, remember that lesson study is essentially a form of research. The activities of lesson study can become isolated or disconnected from one another if a group loses sight of its research question. Second, the entire purpose of examining practice does not mean examining the teachers — students’ thinking and their needs should motivate your work, rather than passing judgment on your colleagues. Third, lesson study is most productive when teachers engage in it with the explicit purpose of learning teaching strategies and principles that can carry over into their everyday lessons. Finally, lesson study is not a vehicle for creating a library of tried-and-tested lessons for teachers to borrow from a shelf and import into their own classrooms. It is a process for creating deep and grounded reflection about the complex activities of teaching that can then be shared and discussed with other members of the profession.

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2. The ideas presented here are based on our work with lesson study groups. Clea Fernandez, Sonal Chokshi, Joanna Cannon, and Makoto Yoshiida, “Learning About Lesson Study in the United States,” in Edward Beauchamp, ed., New and Old Voices on Japanese Education (Armonk, N.Y.: M.E. Sharpe, 2001); and Clea Fernandez, Joanna Cannon, and Sonal Chokshi, “A U.S.-Japan Lesson Study Collaboration Reveals Critical Lenses for Examining Practice,” Teaching and Teacher Education, in press. We have not only observed Japanese and American teachers conducting lesson study in their own schools, but we have also worked with Japanese teachers as they “coached” American teachers attempting lesson study for the first time. From these various perspectives, we have developed the advice we offer.


4. The shared components of these lesson plans provide key information that allows teachers to support the functions of lesson study. For a sample lesson plan format that outlines these key components, please visit www.tc.columbia.edu/lessonstudy/tools.html. You can also view actual Japanese lesson plans on a variety of topics, at a number of grade levels, and in various subject areas at www.tc.columbia.edu/lessonsamples.html.

5. A diagram of this chart, with suggested planning guidelines and example descriptions, is available at www.tc.columbia.edu/lessonstudy/tools.html.

6. We have developed a protocol for observing and discussing lessons that can be passed out to members of your lesson study group and other invited observers. This protocol summarizes some of the guidelines and “rules” for the lesson study process that we recommend. It is available on the Web at www.tc.columbia.edu/lessonstudy/tools.


8. Lesson Lab, Inc., currently maintains a website (www.lessonlab.com) that provides the largest video database of teaching in the world. This website also provides information about software, research, and services for supporting multimedia work by teachers and in schools.