

Three goals

- **Begin where people are**
- **Give them something they can take and use right away**
- **Create disequilibrium (Yusaburi)**





Moving from the Algorithms to the Practice of Lesson Study

To Daily Practice

2010 9th Annual Lesson Study Conference

***Are We Doing Lesson Study Right?
Looking Back and Looking Ahead***

30 April 2010

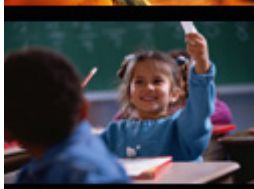
Patsy Wang-Iverson

pwangiverson@gmail.com



Looking Back

- *Jugyou Kenkyuu*
- *Lesson Research and Lesson Study*
- *Lesson Study*
- *Lesson Study: many meanings and (mis)interpretations*
- *Jugyou Kenkyuu*



After 10 Years

- ***Kyozai Kenkyuu***
- ***Hatsumon***
- ***Neriage***
- ***Yusaburi***



Kyozai Kenkyuu

"investigation of instructional materials," encompassing not just textbooks, teacher manuals, and (mathematics manipulatives), but a wider range of materials, including the course of study (standards), the educational context, learning goals, tools, research and case study publications, lesson plans and reports from lesson study open houses, and ideas gained from research lesson observations.

Kyozaikenkyu focuses on investigating students' prior knowledge, learning experiences, state of learning and understanding, which makes it possible for teachers to be able to anticipate students' reactions and solutions to the problems students study during the lesson.



Jugyou Kenkyuu

- *Too much time for just one lesson*
- *Nice to have*
- *Must have*
- *How can we not?*



A view of the traditional classroom?

Let students *follow*
and *figure* what's on my mind
I push to *finish*.

***We can use jugyou kenkyuu to
move beyond the 3 F's.***

Juin Ee TEO and Patsy Wang-Iverson

Moving....

From students trying to figure out what is in the teacher's mind to teachers trying to figure out what is in the students' minds.



Moving....

From making assumptions about student learning to collecting data on student thinking, learning, and, most importantly, misunderstanding.





"Today I want you to think and use new methods for subtraction."

What is this student's understanding of "new methods"?





“I know you believe you understand what I said, but I don’t know if you realize that what you heard was not what I meant.”

- Anonymous



"What's the most important benefit to jugyou kenkyuu? You develop the eyes to see children."

– A Japanese elementary principal

Lewis, C. (2002) *Lesson Study: A handbook of teacher-led instructional change*, p. 27.



The child's logic may be limited but it will guide him; our logic is more adequate but can easily confuse him.

– **David Hawkins**, *The Informed Vision* (p. 95)

Observing a live lesson helps up develop the ability to see through a child's eyes.



A view of jugyou kenkyuu in 25 words

- Site-based, teacher-led, ongoing professional learning to deepen understanding of content/instruction, focused concretely on *student thinking* through careful observation, thoughtful discussion, and reflection.

Your view of jugyou kenkyuu in 17 syllables



Tracey Carter:

*I wonder why how
We investigate, learn more
Create, teach, they grow*

Kyle Radcliff:

*Many minds unite
Plan, collaborate and trust
Students build knowledge.*

Lori Zaimi-Cuevas:

*Jugyou Kenkyuu
Makes me very happy though
To learn from colleagues*

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Bruce Thomas:

*Let's float the problem
And probe the universe of
Misunderstanding.*

Ann Farrell (Dayton, Ohio):

*Teachers as learners
Work together to research
Their students' thinking.*



Your view of jugyou kenkyuu in 17 syllables

Mike Roundtree:

*First I learn and share
Students experience the same
We then become whole.*

Suzanne Farrand:

*Learning by watching
An intense interaction
Students better off.*

Connie Yarema:

*All about students
Knowledge of content, teaching
To improve practice.*



The Heart of Jugyou Kenkyuu

*Teaching and learning –
A shift from “eyes on teacher”
To “through students’ eyes.”*

– Carol Harle
San Antonio, TX



What are the non-negotiable features of jugyou kenkyuu, without which we no longer should call it jugyou kenkyuu?



Non-negotiable aspects of Jugyou Kenkyuu

Your responses:

- **Carol: teacher collaboration**
- **Aina: teacher learning**
- **Edie: Focus on student understanding**
- **Grady: Strong community, safe learning environment**
- **Heather: Student and teacher reflection**
- **Jed: Observe live lesson with own eyes**
- **Sachiko: Teacher-led**
- **Ein: Planning a lesson with your colleagues**
- **Lorena: Collect and analyze student data**
- **Guzman: Student discussion**
- **Lori: The use of knowledgeable others**



From American Educator, spring 2010:

<http://www.aft.org/newspubs/periodicals.ae/>

"For students to engage in inquiry, they must have a strong foundation of knowledge. To participate well in class or group discussions, students need to learn to listen. Student collaboration is important, but it requires that students also work alone, so that they may bring something to each other. And students become active learners not only by talking and doing, but by sitting still with their thoughts. Conversely, the student who cannot listen to others is trapped in his or her own limited perspective."



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Jugyou Kenkyuu Cycle

1. STUDY

Considering long-term goals for student learning and development,
study curriculum, instructional materials, standards
(kyozaikenkyu)

2. PLAN

Select research lesson
Anticipate student thinking
Plan data collection and lesson

3. CONDUCT RESEARCH LESSON

One team member teaches,
others, *including outside observer(s)*, collect data
Assessment for learning!

4. DISCUSS AND REFLECT [NOT Debrief]

Share and discuss data:
What was learned about student thinking?
What are implications for this unit
and more broadly?
What learning and new questions do we
want to carry forward in our work?



Assessment for Learning

“How can anyone be sure that a particular set of new inputs will produce better outputs if we don’t at least study what happens inside?”

“Teachers need to know about their pupils’ progress and difficulties with learning so that they can adapt their own work to meet pupils’ needs.”

Assessment: activities undertaken by teachers – and *by their students* in assessing themselves – that provide information to be used as feedback to modify teaching and learning activities.

Assessment for learning (formative assessment): evidence is actually used to adapt the teaching to meet student needs.

From Black et al. (1998) *Inside the black box: Raising standards through classroom assessment.*



Leaving no child behind

“Improved formative assessment helps low achievers ... and so reduces the range of achievement while raising achievement overall.”

Teachers concentrate on specific problems with students’ work and give them a clear understanding of what is wrong and how to put it right.

From Black et al. (1998) *Inside the black box: Raising standards through classroom assessment.*



Formative assessment during Jugyou Kenkyuu

**Observation and data collection during the
public lesson:**

”Negotiating the swiftly-flowing river”

Lewis, C & Tsuchida, I. (1998). A lesson is like a swiftly flowing river, *American Educator winter, 14-17, 50-52.*



What Distinguishes Jugyou Kenkyuu?

- It is teacher-led, long-term professional learning
- It is non-hierarchical; novices can contribute fresh perspectives (making the familiar strange)
- It is planned collaboratively over a period of time through intensive study of materials, standards, and students (kyozai kenkyu)
- It supports a collaborative focus on student thinking through observation of classroom practice in real time with outside guests

It goes beyond examining student work to examining students working.



What jugyou kenkyuu is not...

- creating a perfect lesson (whether the lesson went well)
- one cycle is not lesson study
- watching a videotaped lesson is not sufficient
- a research lesson is *not* a demonstration lesson
- a particular teaching strategy or philosophy on teaching



The goal is not a library of lessons



It may be useful, but it is a byproduct and *not* the primary purpose of lesson study.



Lesson study = professional development?

Traditional professional development:

- begins with an answer
- is driven by the expert trainer
- is workshop-based
- features communication flow from the trainer to the participants
- reinforces (tacitly) hierarchical relationships
- uses research to inform practice

Lesson study:

- begins with a question
- is driven by the participants
- is classroom-based
- features communication flow from conversation among the participants
- reinforces reciprocal relationships
- treats practice as research

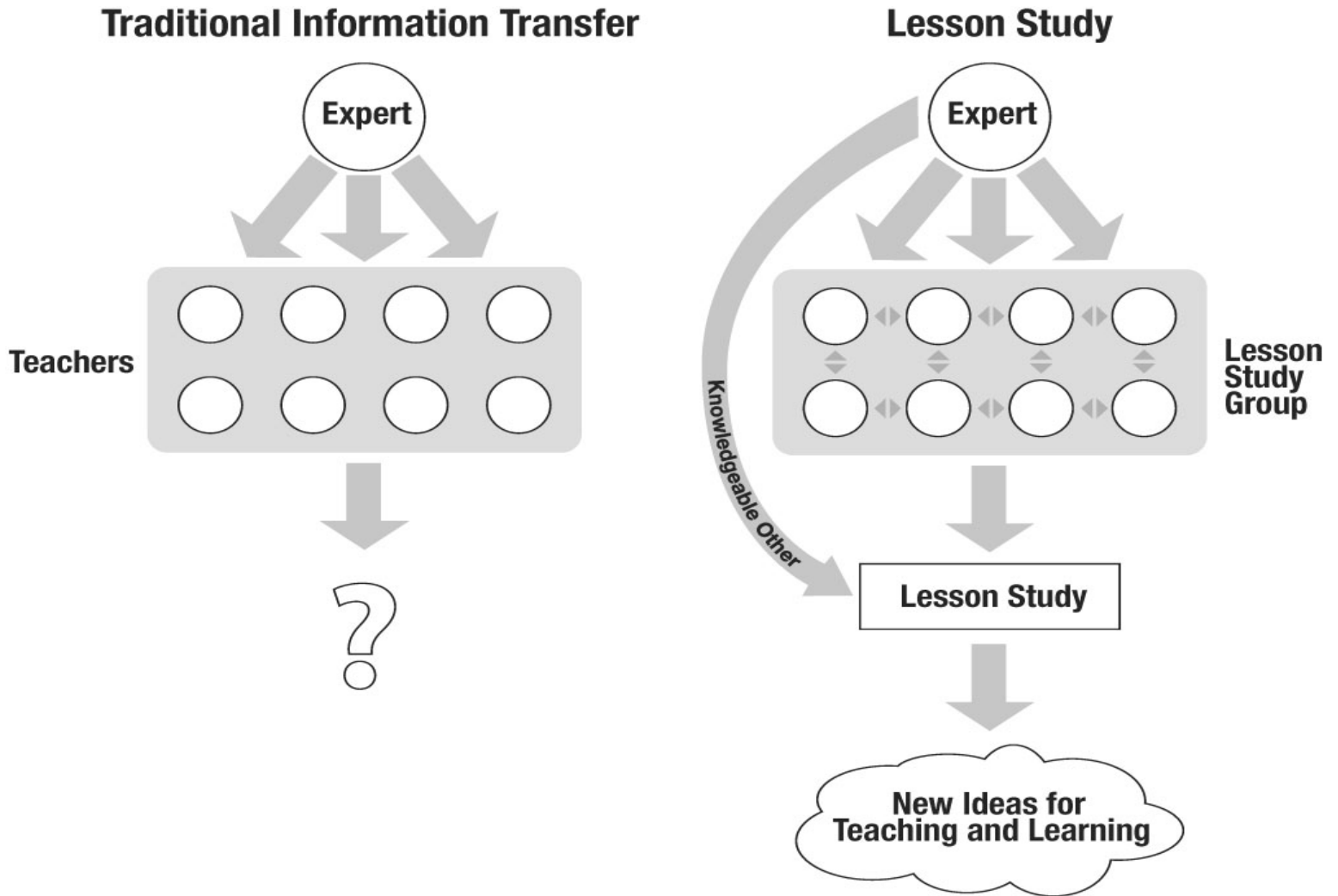
—Courtesy of Lynn Liptak

Lesson study is NOT training!





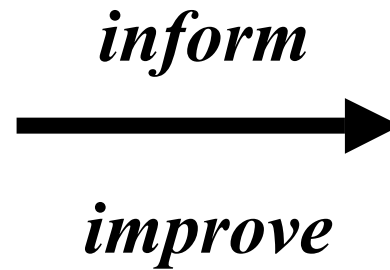
Jugyou Kenkyuu vs. Traditional Information Transfer



Fr. A. Takahashi



Outcome of Jugyou Kenkyuu



**Daily
instruction**



Outcome of Jugyou Kenkyuu

Many teachers rely on having some students who have the right answer.

- Karen Arth, 8 June 09

Moving from looking for right answers to understanding student misconceptions.



Were it not for lesson study, we would not be talking about math as much as we do.

*– Kerensa Maiden, grade 4 teacher
Marie Reed Community Learning Center
District of Columbia Public Schools*



One is only as effective as one's own level of understanding.

— *Linda Bauld**,
grade 5 teacher,
Sunnybrae School,
Foster City, CA

***From How many seats? - lesson study video:
www.lessonresearch.net**



To Implement Jugyou Kenkyuu Effectively

Please leave your ego at the door.



Through jugyou kenkyuu...

We can make learning and teaching a public and shared endeavor that continually improve.

It offers us a concrete way to share our individual knowledge and build collective understanding.



“A learning space needs to be hospitable not to make learning painless but to make the painful things possible, things without which no learning can occur—things like exposing ignorance, testing tentative hypotheses, challenging false or partial information, and mutual criticism of thought.”

- Parker J. Palmer