

# Japanese Lesson Study in the College Classroom

What Happens when a Group of Instructors  
Carefully Examines Teaching and Learning in  
a Single Class Period?

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# Enduring Issues in Teaching & Learning

How to...

- create a climate to support teaching improvement
- create a structure that supports ongoing SoTL
- help instructors learn how to do classroom inquiry
- focus professional development on classroom practice
- build practitioner knowledge for teaching that can be accessed and used by others

# Building Pedagogical Knowledge

As much as they might benefit from the knowledge of their colleagues, most teachers have not accessed what others know and must start over, creating this knowledge anew.

(Hiebert, Gallimore & Stigler, 2002, p.11)

. . . the successes of [excellent teachers] tend to be born and die with them: beneficial consequences extend only to those pupils who have personal contact with the gifted teachers.

(John Dewey, *The Sources of a Science of Education*, 1929, p.10)

# Improvements in Learning

Reform documents that focus teachers' attention on features of "good teaching" in the absence of supporting contexts might actually divert attention away from the more important goals of student learning. They may inadvertently cause teachers to substitute the means for the ends—to define success in terms of specific features or activities instead of long-term improvements in learning.

James Stigler and James Hiebert

Lesson

# What *is* Lesson Study?

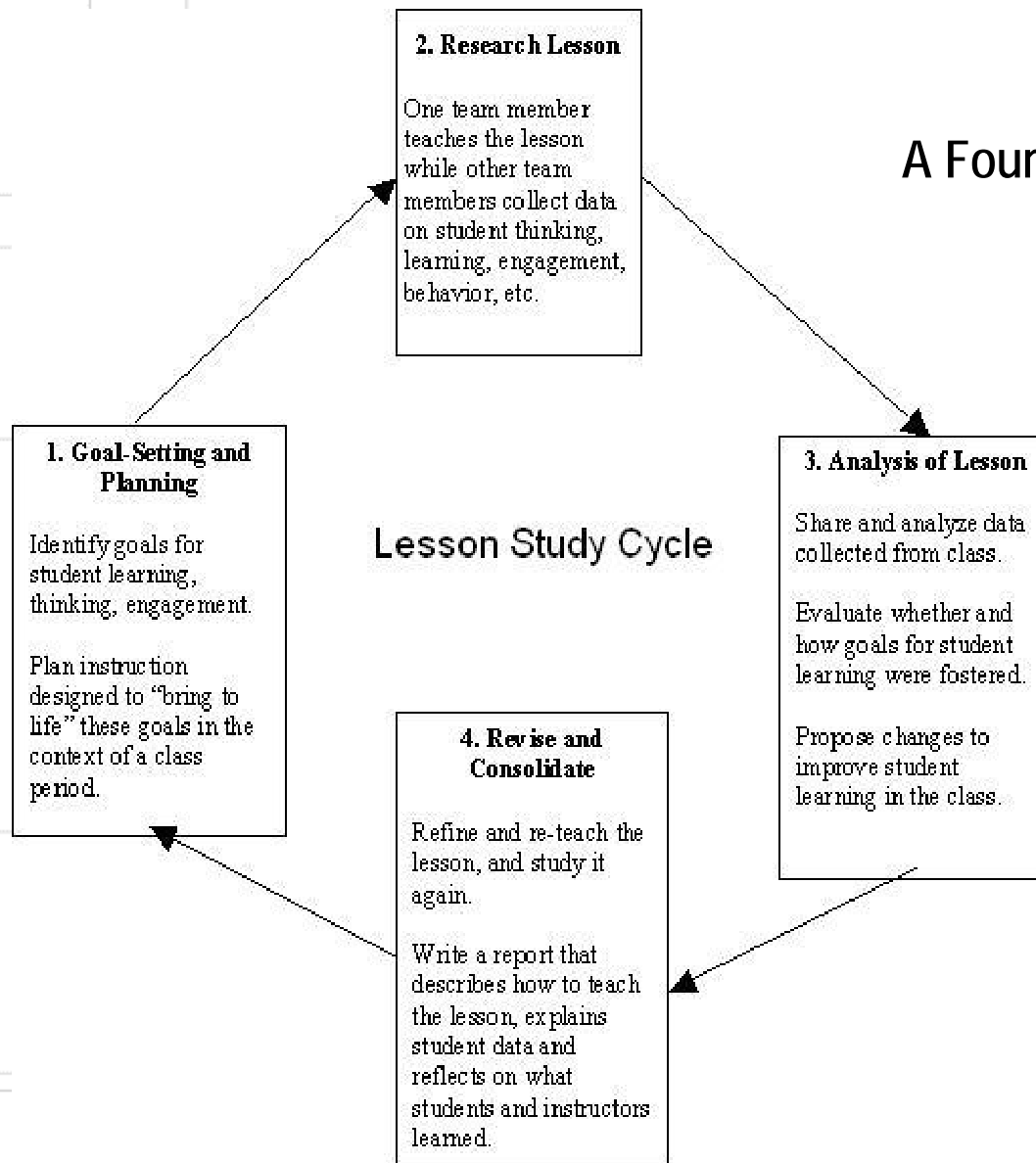
Study

Project

# A Definition

*Lesson Study is a process in which teachers jointly plan, observe, analyze and refine actual classroom lessons called "research lessons."*

## A Four-Step Process



# "Can You Lift 100 Kilograms?"

The Lesson Research Cycle

Grade 5, Komae School #7, Tokyo, Japan

By Catherine Lewis

Mills College

*On-line video clip available at*

**<http://www.lessonresearch.net/>**

# UW-L Lesson Study Participants (2003-04 AY)



*Japanese Lesson Study in the College Classroom, Cerbin & Kopp, 6/2/04*

# Lesson Study Groups @ UW-L

Participants	Course	Topic	Teaching & Learning Goal
<u>Biology</u> (Scott Cooper, Anne Galbraith, Tim Gerber, Deb Hanmer, Dan Sutherland)	Introductory Biology	Human population	Collect and analyze data on how human population growth affects quality of life and the environment
<u>Economics</u> (Donna Anderson, TJ Brooks, Lisa Giddings)	Microeconomics	Marginal costs	Understand how marginality is linked to supply by examining diminishing returns & evaluating effect on marginal cost
<u>English</u> (Terry Beck, Susan Crutchfield, Bryan Kopp)	Freshmen Composition	Thesis revision	Improve students' abilities to revise their drafts by identifying and evaluating main ideas and entering into critical conversations with peers
<u>Psychology</u> (Melanie Cary, Bill Cerbin, Rob Dixon, Carmen Wilson)	Introductory Psychology	Bystander intervention	Develop students' ability to analyze and explain human behavior in terms of relationships among multiple factors

# What We Are Learning

- Student learning goals become the focal point of the lesson
- The focus shifts from teaching per se to how students learn from the experience
- Lesson Study leads to progressive discourse and continual improvement of ideas
- Instructors develop a common language and understanding of T & L
- Instructors seem to think it's time well spent
- The lesson provides a concrete context for understanding theory and practice
- Lesson Study combines teaching improvement with scholarly inquiry
- The overall process builds a community of practice around T & L

# Focus on Student Learning



*"In three years [I've been teaching here] I don't think we've sat down had much discussion of student learning outside the lesson study project." (RD 14:50+)*

*"We got off on a lot of different tangents in our discussions...about learning, what students should learn, our department learning objectives.... [Lesson Study] motivated that discussion of student learning." (DA 13:53+)*

# Learning Goals & Outcomes

*"One of the things that we focused on a lot in terms of process was the importance of the goal, what is it in the big picture that we're trying to get students to understand and linking ... that goal in a very big way to a smaller goal to the specific lesson." (CW 15:23+)*

*"We're having a lot of discussions about core requirements for our major... What I liked about this was that this was the first time I was able to sit down with people and bat around ideas. We have some objectives for this class to get them ready for other classes. It was nice to hear what other people are thinking" (AG 15:54+)*



A lesson is like a swiftly flowing river; when you're teaching you must make judgments instantly.

When you do a research lesson, your colleagues write down your words and the students' words.

Your real profile as a teacher is revealed to you for the first time.

*Reflection from a Japanese teacher*

# Shifting from Teaching to Learning

*"[With Lesson Study] you're getting more information from this as the observers and then coming back and talking about the student learning whereas if we just go in and observe a colleague in the department, we've got ... a lot of attention ... on what that person, the instructor is doing.... but there's less of that intensive [focus] -- are the students really learning what the teacher or the instructor has as a goal for this class?" (MC 5:36+)*



The most notable change in my lesson planning and teaching has been the questions that I ask myself. The first question I ask myself about a lesson is “what do I want the students to learn from this lesson?” While this may seem an obvious question to ask, it was never something I asked myself until I began the lesson study process. The question I was asking myself before lesson study was more like “what am I covering today?”

*Reflection from an American teacher*

# What does it mean to focus on student learning?

It is challenging—to try and think about the students' solutions to the problems before they can do it, and to try and get all of the answers they might come up with. You have to think about things from the student's point of view and that is a big change.....[now] we think a lot more about the motivation for the lesson and making sure that the kids have the prior knowledge that they need before we teach each lesson.... Before we did lesson study we really didn't think about what the student responses would be to the questions. When we posed a problem we never really thought about what the kids would come up with. It was..." Well, we hope they get the right answer and if they don't then we will deal with it." Now we are really thinking about, "Well, what if this answer were to come up? How would we deal with it?"

*Reflection from an American teacher*



*"[We] had already been working on modules where a person would kind of develop something with input from other faculty people and then we would share it.... but I think what [Lesson Study] really added that was good was the initial meetings were really helpful where we talked as a group about a specific problem.... When I was involved in the other modules, my whole focus was on developing the module...and then when we started this process, it shifted to how do we get the students, you see what I'm saying, to learn the material instead of how do I get a module out there.... This process did help to shift that focus in a really important direction" (DH 16:50+)*

# Continuous Improvement of Teaching & Learning

*"To say that we've finished a lesson really is kind of the antithesis of what lesson study is about. It's a process which is ongoing. I mean, we're never going to figure out how human cognition works, like we're never going to figure out how the universe works. Why is it that if people in physics can accept that, that we'll never be done answering all the questions in physics, feel as though in teaching they will have at some point answered all the questions when it comes to teaching?" (TJ 1:11+)*



# Making Lasting Changes

When you improve a little each day, eventually big things occur. . . Not tomorrow, not the next day, but eventually a big gain is made. Don't look for the big, quick improvement. Seek the small improvement one day at a time. That's the only way it happens—and when it happens, it lasts.

(Wooden, 1997, p.143)

# Progressive Discourse on Teaching & Learning

*"[In the development process] we tossed ideas out and ... they'd kind of bounce around the table a few times until they'd die and some of would go on.... Most [ideas] probably didn't make it. We went through a lot of ideas before found one that stuck." (SC 4:49+)*

*"When you think about the roadblocks of what's going to happen or how a particular concept is going to get across, all of a sudden there's new roadblocks ... spotting those and giving feedback. We all thought it would go this way and how do you control things to get them back to where you wanted them." (RD 6:22+)*

# Allocation of Time & Resources



*"One good thing that came out of the process of sitting around with five or six ideas and bouncing them around until four or five of them died was that a lot of times we do that on our own in the classroom so it takes you about four lectures before you get it right... [With Lesson Study] you can cut through a lot of that pretty quickly.... It was worth the extra hour or two to discuss it or whatever it took because you probably got to a better lecture quicker than if we all tried it individually, tweak them, you know, the next year and the next year. It might be four years before you got it right, if ever." (SC 6:54+)*

# Allocation of Time & Resources, *cont.*

*"A lot of it [what happens in department meetings] is information conveyance.... it's a more effective use of our time to get together and talk about something that's going to affect student learning. I mean that's really what our jobs are about rather than committee meetings.... I don't see 15 hours a semester as a lot of time.... and if it is, then cut something else out..." (DA 11:10+)*



# Why bother?

*"[H]alf of the value in this is in are you understanding student learning better. You can always use that - so [with] the actual mechanics of the lesson, there's also useful things there in watching the details of how students operate in groups or whatever... I ended up using the experiment for a very different reason.... [Lesson Study] pushed my understanding of that particular topic further so it gave me a deeper understanding of it.... and then [it gave me an opportunity] to try to think about how students think about this particular topic" (TJ 12:19+; 13:22+)*

*Lesson study is a simple idea. If you want to improve instruction, what could be more obvious than collaborating with fellow teachers to plan, observe, and reflect on lessons? While it may be a simple idea, lesson study is a complex process, supported by collaborative goal setting, careful data collection on student learning, and protocols that enable productive discussion of difficult issues.*

*(Lewis, 2002)*

# Interested in Trying Lesson Study?

- We will provide support for groups of instructors to try Lesson Study during the 2004-2005 academic year, including resource material and consultations.
- All you need is a group of at least three instructors (3-6) willing to meet regularly during the academic year—to design, teach, observe and refine a single lesson for a course in your field.
- Contact Bill Cerbin, 785-6881 or [cerbin.will@uwlax.edu](mailto:cerbin.will@uwlax.edu)
- More info at <http://www.uwlax.edu/sotl>