

**Mathematics Lesson Study Spring 2008 – Thursday 4:45 Section  
Graduate Credit Information**

**Instructor:** Eric Towne, [etowne@fas.harvard.edu](mailto:etowne@fas.harvard.edu), (207) 345-3645.

**Websites:** <http://www.fas.harvard.edu/~etowne/mathe15spring2008.html>  
<http://abel.math.harvard.edu/~judson/lessonstudy/>

**Meetings:** Thursdays 4:45-5:45, Sever 302, starting the second week of the semester.

If you absolutely cannot attend regularly at this time, please contact me about the possibility of switching into a different (but equivalent) graduate credit section.

Students who have already completed multiple graduate lesson study seminars should contact Andy Engleward ([engelward@math.harvard.edu](mailto:engelward@math.harvard.edu)) about a possible alternative seminar.

**Format:** We will meet in a seminar format in order to encourage a high level of communication and exchange of ideas.

**Grading:** Because of the team-oriented nature of this seminar, your attendance and participation are crucial. Half of your grade will be based on attendance (tracking the actual number of minutes you attend, so punctuality counts); the other half will be based on participation. This score will then count for 10% of your grade in your course

**Topics:** We will learn about and then put into practice a method called *Lesson Study*.

Lesson study is the process of instructional improvement where teachers collaboratively plan, execute, observe, and discuss lessons in the classroom. Lesson study is a central part of a larger process called lesson research. Although lesson study originated in the United States about one hundred years ago, it is now most widely practiced in Japanese elementary and middle schools. Lesson study has returned to the United States in the last few years and has attracted a great deal of attention in K-12 education.

In lesson study, teachers select an all-encompassing goal and a research question to provide a focus for planning the lesson. For example, the teachers may decide that they want their students to become independent learners as a goal and the research question might be how to give students a better understanding of functions, but the individual lesson might focus on understanding composition of functions. Teachers then work in small groups to prepare a detailed plan for a single lesson, and one of the teachers will teach the lesson in a real classroom while the other teachers observe. The teachers will meet again to discuss and revise the lesson. If time permits, another teacher will present the lesson to a different classroom while the other members of the group once again observe. Finally, the teachers will meet again to discuss their observations and produce a report of their study lesson paying particular attention to their goal and research question. (last two paragraphs courtesy of Tom Judson)

**Resources:** Lesson Study Research Group at <http://www.tc.columbia.edu/lessonstudy/>  
Lesson Study in Japan - U.S. Science Education at <http://www.lessonresearch.net/>  
Lesson Study Communities Project in Secondary Mathematics at <http://www2.edc.org/lessonstudy/>  
Lesson Lab, Inc. at <http://www.lessonlab.com/>  
Global Education Resources, LLC at <http://www.globaledresources.com/>