

LESSON STUDY PROJECT

The purpose of lesson study is to provide a safe, supportive, and collaborative environment to prepare and teach lessons using the pedagogical content knowledge from MATH 791. *This is an ideal time to try to teach new things before you are out there on your own.*

Design

GSI's will work in groups (2-3) to design two lessons, implement both lessons, attend both lessons, video-record both lessons, and modify instruction between the two lessons. Only one GSI needs to teach each lesson, but all group members must attend at least one lesson and help in all steps of the process. The same GSI need not teach the second lesson. The preferred method for the lesson study is to ask your lecturer if you are a recitation instructor. Otherwise, I will provide a list of instructors to ask. There are two ways you can run the lesson study project:

Method 1-Teach TWO sequential lessons	Method 2-Teach TWO similar lessons
Step 1: Prepare lesson plans and design a sequence of lessons together.	Step 1: Prepare lesson plan and design a lesson together.
Step 2: One person teaches the first lesson. This will be video recorded .	Step 2: One person teaches the first lesson. This will be video recorded .
Step 3: Group meets and discusses what needs to be changed for the next class to be taught. Group needs to meet before teaching the <i>sequential</i> class.	Step 3: Group meets and discusses what needs to be changed for the next class to be taught. How will the lesson be modified for the <i>different</i> class.
Step 4: One person teaches the <i>sequential</i> lesson to the <i>same</i> class. This will be video recorded .	Step 4: One person teaches the <i>same</i> lesson to a <i>different</i> class. This will be video recorded .

Method 2 is strongly suggested with the limited time for the lesson study project.

When completing the project you must turn in:

1. Two lesson plans as discussed in class (must include timeline, topic, measurable goals, assessments, and mathematical tasks).
2. Video recordings of both lessons
3. Notes from discussion between meetings. Brief description of what was discussed and what was changed.
4. Reflection on lesson study project.
5. 360 Evaluations

Topic	Description	Point Values
Video Recordings	Actual video files submitted to instructor	10
Lesson Plan 1	Clearly stated topic, timeline, materials, measurable goals, assessments, and mathematical tasks. <i>I will check for alignment with your video data.</i>	10
Notes from Discussion between Meetings	Written or audio or video recorded notes from meeting demonstrating that you considered what changes need to be made to the lesson(s)	10
Lesson Plan 2	Clearly stated topic, timeline, materials, measurable goals, assessments, and mathematical tasks. <i>I will check for alignment with your video data.</i>	10
Reflection on Lesson Study	One or more pages describing what you learned and what you still wish to learn.	20
360 Evaluations Participation	Each classmate must describe how the rest of the group worked with them.	20

KEY COMPONENTS FOR LESSON PLAN:

- Names of Students Involved
- Topics
- Timeline
- Materials Needed
- Measurable Goals
- Mathematical Tasks (opportunities for students to attempt to “do” mathematics during class)
- Assessments (necessary during class to measure if goals have been met)
- Aligning Goals, Tasks, and Assessments

Questions to help prepare your lesson.

Do I clearly write the topic/goal on the board so students know what we are covering today?

Are my goals realistic in a 50 minute class?

Do my tasks help students understand/achieve the desired goal?

Does my assessment appropriately measure student learning of the topic for the purpose of the goal?

Did I do a quick summary at the end of class on what was covered today and what will be expected of them on more summative assessments?

GUIDE TO DISCUSSING HOW TO REVISE A LESSON

Use this as a guide to revising your first lesson plan for the next time. Feel free to bring the video to class.

Reflecting on the lesson

- What went well?
- What needs to be revised?
- What was surprising?
- Did the observations indicate that the measurable learning goals were met? How do you know?
- Should the measurable goals change? If so, how and why?
- How will we make changes to the next lesson to accommodate the data we observed about this lesson's measurable goals?

FINAL REFLECTION

Your Final Reflection should be one to two pages (Single-Space, 1" margins, 12pt font, Times New Roman or TeX equivalent) that explains what you learned as a group through the process of lesson study. Below are some questions that will guide you in writing your final reflections. You do not need to answer these questions in order or directly in your final reflection, but the ideas around how the entire process affected your understanding of the material is important.

What did you do well on the first lesson? Did you meet all of your measurable goals?

What did you need to improve upon with the first lesson?

What did you do well on the second lesson?

What observations did you notice in your first lesson that you addressed in your revisions for the second lesson?
Did you notice a change in the second lesson from those revisions?

What overall differences were there between the first class/lesson and the second class/lesson?

What do you believe could still be improved upon with the lesson?

360 EVALUATION

Please fill out the form below and hit REPLY to send this information to me. It is part of your grade for the project.

If I don't receive it from you by April 6th, your participation grade will be ZERO.

NAME:

Project:

1. Describe your role in the project (i.e., what did you do as part of the project?).

2. List your name FIRST, then the names of the other persons in your group who worked on the project. Give the score you think they deserve for their work on the project from 1 (worst) to 10 (best).

<i>Names HERE</i>	<i>Preparation/Collaboration Rating 1-10 How well did they collaboratively work with the group and help in preparing for the lesson?</i>	<i>Attendance Rating 1-10 How well did the participant attend and participate in the observations, reflections, and teaching of the lesson?</i>

3. Give your assessment of your project and if there is anything I should know about your contribution or other peoples' contribution.

Lesson Study Checkpoint 1
Due by the class after Spring Break

Names in group:

Course you will be teaching:

Topics to be covered:

Day and Time of First Lesson:

Day and Time of Revisions:

Day and Time of Second Lesson:

Measurable Goal (Procedural or Conceptual?)	How will you measure that goal during class?	How will you collect data to see if your goal has been achieved?

Lesson Study Checkpoint 2
Due March 29th or March 30th

Names in group:

Course you will be teaching:

Topics to be covered:

Day and Time of First Lesson:

Day and Time of Revisions:

Day and Time of Second Lesson:

What are the materials you require to teach the class?

What are your measurable goals?

What mathematical tasks will you use to measure those goals?

Give a brief timeline and discussion of your lesson plan.