

Course: EDEE 432, Math Methods, Fall/Spring 2011-12
Signature Assignment: *Lesson Study Report*

e. Brief Description: The *Lesson Study Report* is the signature assignment for EDEE 432 (formerly EDEE 450), Mathematics Methods II. This report is compiled throughout the lesson study process and written at the end of the process to document the lesson study process as well as group reflections and individual reflections. The bulk of the report is written as a group; however, each teacher candidate is responsible for writing his or her individual reflections. ACEI standards addressed: 1.0, 2.3, 4.0, 5.1, 5.2.

Instructions to Candidates: Your lesson study report should detail the entire lesson study process. Your report should be at least ten pages in length, not including appendices. Additionally, you must use *pseudonyms* [e.g., for the names of the school, teacher(s), student(s)] when describing your teaching experience, and indicate that you are using pseudonyms. Write the report using the following guidelines. Label each section appropriately.

Lesson Study Report Guidelines: The purpose of the lesson study report is to document, for yourself and others, the discussions and reflections that took place throughout the entire lesson study process. Anyone who reads this report should be able to understand the intents, rationales, and issues that your group encountered as it engaged in this process. In essence, you are being asked to “re-trace” your steps throughout this process, from the goal selection, to the first planning, to the first lesson, to the first debriefing for that lesson, to the second planning, *the second lesson, and *second debriefing (if applicable). Since there are a great number of issues you could discuss in this report, it would be useful for you to identify the guiding focal points or themes (research focus, overarching goals, and content specific goals) that provided direction to your lesson study, trace these themes throughout the entire process, and discuss them in your report.

Parts of the Report

I. Introduction: This section provides an introduction to your group and lesson study. Within it, you should introduce all group members, as well as the research focus of your lesson study, the overarching goal and the content specific goal(s). It should also include a brief overview of what the reader should expect to see in the remainder of the lesson study report, and any other pertinent information which might orient the reader.

II. Retracing and documenting the “steps” of lesson study: This section provides a description (in any form—list, narrative text, charts) of the focal themes discussed throughout your group’s lesson study process. Time (ie. number of hours) devoted to each step of the process should also be documented below.

◆ **Goal selection:** This part describes your groups overarching goal, your research focus, and how your group translated this for your lesson study (through research questions, lesson study goals, content goals, and lesson-specific goals).

◆ Planning 1: This part describes the planning discussions your group conducted in its attempts to address these goals. It should also include a description of specific concerns or challenges that were addressed while planning the lessons. Materials or resources that were used should also be documented here.

◆ Lesson 1: This part summarizes and describes the implementation of your first lesson. You should describe what happened during the lesson, including the main steps of the lesson, time allocation, students' main learning activities, and important points relating to instruction.

◆ Debriefing 1: This part describes what you learned from implementing your lesson—ie., what worked, what did not work, issues it raised for you about your goals (lesson goals, content goals, and lesson study goals), etc.

◆ Planning 2 (Revising): This part describes the changes that were made between the two lessons and the rationale for these changes, especially in the context of your focal lesson study themes. It should outline the relationship between the two lesson plans (lesson 1 and lesson 2).

*Optional Section (only if Lesson 2 was taught)

◆ Lesson 2: Same as for Lesson 1. In addition, main changes that were made between the two lessons should be highlighted.

◆ Debriefing 2: Same as for Debriefing 1. Since the purpose of lesson study is not to produce a “final” perfect end product, this lesson plan should not be revised after the feedback session. Instead, your group should discuss what you learned from the second implementation of your lesson, and list a few suggestions for what could be changed (and why) about the lesson.

I. Group reflections: This section should include all, but is not limited to, the following topics:

1. Key discussions, concerns, challenges, and issues that your group faced while engaging in the lesson study process.
2. Your group's most vivid impressions (good and bad) from this process.
3. What your group learned
 - a. from the lesson – including new insights gained regarding your research focus.
 - b. about the process of lesson study.

II. Individual reflections: This section should include a ****detailed** reflection on what **you** learned as an individual while working on this process, regarding:

1. Mathematics (i.e. new mathematical conceptions, revealed mathematical misconceptions)
2. Math teaching
3. Math learning

For each, address resulting changes in your thinking, general techniques or principles that you learned from this process, and specific ideas you would take back to your classroom.

*** Detailed means: To name or state explicitly; thoroughly or meticulously; with attention to particulars; particulars considered individually and in relation to a whole.*

III. Appendices: This section should include **copies of the original and revised lesson plans**, samples of student work, observation notes, pictures, and anything else you think would help illustrate your work. *At a minimum, you should include Appendix A, which has a copy of your original and revised lesson plans.*

IV. Format: The report should follow APA guidelines for formatting and style. All parts of the report, including the appendices, should be included within a single document.

Fall 2011 (EDEE 450)

ACEI Standard	n =	Range of scores	Mean	Standard deviation	Students who achieved target
1.0	18	1-2	1.94	.24	94% 17/18
2.3	18	2	2	0	100% 18/18
4.0	18	1-2	1.94	.24	94% 17/18
5.1	18	1-2	1.83	.38	83% 15/18
5.2	18	1-2	1.83	.38	83% 15/18

Spring 2012 (EDEE 432)

ACEI Standard	n =	Range of scores	Mean	Standard deviation	Students who achieved target
1.0	10	1-2	1.60	.52	60% 6/10
2.3	10	1-2	1.70	.48	70% 7/10
4.0	10	1-2	1.50	.53	50% 5/10
5.1	10	1-2	1.20	.42	20% 2/10
5.2	10	1-2	1.50	.53	50% 5/10

REFLECTIONS

Across the board, teacher candidates taking EDEE 432 (Math Methods) this semester performed at a lower level than teacher candidates in previous semesters. In particular, the percentages of teacher candidates who achieved target went from 94% to 60% for ACEI Standard 1.0, 100% to 70% for Standard 2.3, 94% to 50% for Standard 4.0, 83% to 20% for Standard 5.1, and 83% to 50% for Standard 5.2. While it is unclear why this occurred, there are most likely various explanations for this rather substantial drop in performance. The first may be the nature of this particular group of teacher candidates. In particular, this group of teacher candidates is the first group that had significant difficulties working collaboratively in groups. On the other hand, it is likely that a significant contributing factor for the decline is the change from our previous block system to our current block system. In the past, teacher candidates completed three blocks prior to taking the course to which this signature assignment was attached. This meant that by the time teacher candidates completed the signature assignment (lesson study report) they had completed eight methods courses and four associated practica. Under the new design, these particular teacher candidates had only completed half of this, resulting in far less exposure to, instruction on, and fewer experiences with things such as concepts, principles, theories, and research related to development of children, constructing learning opportunities that support individual students' development, acquisition of knowledge, and motivation, using formal and informal assessment strategies to plan, evaluate and strengthen instruction, reflecting on their practice in light of research on teaching, professional ethics, and resources available for professional learning, and evaluating the effects of their decisions and actions on students.

These results support the research that shows us that experience plays a significant role in the ability to critically observe and reflect upon issues that will significantly impact student learning. In response to this data, it will be necessary to rethink the current block design, or to rethink the use of Lesson Study in a course that is still so early in their program.