105-Lesson Plan

Lesson – Word Problem Roulette

**Big Ideas –**

Working together in groups is a very important skill.

Practice is needed in the relationships and strategies of solving story problems.

Students need a highly integrated understanding of the four operations and the different related meanings in real world context.

**Idaho Standards:**  7.M.1.1.2, 7.M.1.2.6

**Lesson Overview:**

Students will be grouped into 4’s. Each group will be given a word problem in a group setting with the directions of no writing anything, but to figure out how to solve the problem. After an allotted time, each group receives a piece of paper on which to write the directions to solve the problem, with each person writing one step of the problem. Upon completing this, one person in each group will go to the board and work out the problem exactly as I read their directions.

**Lesson objectives:**

Students will collaborate with other students for a final outcome.

Students will communicate their thought processes with each other.

Students will put written words into math symbols.

Students will think and need to agree on the steps to follow for each problem.

**Idaho Standards:** 7.M.1.1.2, 7.M.1.2.6

**Detailed Lesson:**

I first carefully grouped the students into groups of four. I explained there would be no writing until near the end of the lesson. Each student received a copy of the story problem to read and think about. They were told to read, think, and then discuss how to solve the problem. They were not to solve it in their heads or on paper. After about 5 minutes they all agreed they knew how to do the problem, so I gave each group a colored piece of paper to write on. Their directions were to have each person write one step of how to solve the problem. I did not want them to just work out the problem, but to tell how to do it. When they were completed, I asked for one member of a group to go to the board and to follow the directions I gave them exactly. Each group went to the board one at a time. We discussed the directions and where they went wrong. After all the discussion, another word problem was given out with the same directions, and discussions. They did better with this one, and then I had them write 3 sentences of a conclusion of the activity.

**LIMSST Project Literacy Lesson Reflection Form**

Date of Lesson: \_\_April 9, 2008\_\_\_\_\_\_\_\_\_

Word Problem Roulette

**Lesson Title/Topic Areas:**

**Literacy Strategies Used:**

(Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

This is the first time I have done the word problem roulette. My purpose for this lesson was to have them collaborate and come up with an answer. Story problems are hard for most students, and talking them out with someone else is good practice. They also needed to agree on the steps to answer the problem, which is another good skill.

**Student Response to the Lesson:**

(Was the strategy effective? Were students able to read/write as needed in this lesson? What attitudes were displayed? How did specific

 students and/or the class do? How did the literacy strategy aid in developing student understanding of the topic? Cite specific evidence from the samples of student work)

The students found this a tough exercise. At first they misunderstood and thought I wanted an answer (listening is not their high point!). After they thought they were done with the first problem, I interrupted the class and reminded them what I wanted (after looking at their final results.) I stressed using words instead of numbers. They groaned and went back to trying to fix the problem. Some groups argued so much that

They didn’t get finished when the time was up. Next time I will do a think aloud so they can see exactly what I want; unless we have lots of time and I will let them flounder if they need to.

**Lesson Reflection:**

(What worked well with this lesson? What challenges did you encounter in this lesson? Would you change certain aspects of the lesson or the questions that you asked? How does this influence future lesson planning?)

Next time I will do a think aloud or ask for examples of a problem on the board. Floundering is OK if there is time to work around it, but usually there isn’t. I think on the first time in another class I will plan on only 2 problems for the whole period, and let them work their way through the problems. It will be more of a learning experience, I think. Since they need to know how to change words to math expressions for the ISAT, it is a good practice on the reversal, too. They always have trouble with this. I can see doing this again, and that it would be easier each time we do it.

**Relationship to Previous Instruction:**

(Have you taught this lesson/topic prior to the LIMSST project? If so, how did your teaching of this lesson differ from what you taught before? How did students’ reactions to this lesson differ?)

I haven’t done this before, but we have done story problems. I am lucky that the teacher they have the year before me does a lot of story problems and they have a lot of practice, but to work in a group and do the steps without the answer is definitely new and an important skill for them. The students seemed to like this, but got frustrated at times when they couldn’t get their point across to the others in the group.