

**Lesson Plan**  
**(First Unit Lesson)**

Name: **108** [REDACTED]

Course: Pre-Algebra

Grade: 8<sup>th</sup> grade

**Unit: Ratio and Proportion**

**Big Idea:** Students will develop a more complete understanding of ratio and proportion. Students will extend their knowledge by defining and applying ratios and proportions to real world situations.

**Subconcept:**

Develop understanding of ratios and proportion.

**Literacy Strategy(s):**

- Silent Discussion/Pair Share

**Lesson:** (Writing) Silent Pair Discussion

**Date Taught:** 3/24/09

**Learning Objective(s):**

- Students will be able to elicit prior knowledge of ratios and proportions.
- Students will find the relevancy of ratios and proportions.
- Students will be able to give a definition and example of both.
- Students will be able to participate in a discussion.

**Idaho Standards:**

**Standard 1: Numbers and Operation**

- Goal 1.1 Understand and use numbers.
  - 8.M.1.1.2 Use rational numbers, including percents and ratios, and  $\pi$  to solve problems.

**Standard 2: Concepts and Principles of Measurement**

- Goal 2.2: Apply the concepts of rates, ratios, and proportions.
  - 8.M.2.2.1 Use rates, proportions, ratios and map scales in problem solving situations.

**Detailed Description of Lesson:**

- The students will have an entry journal assignment. "What do you remember of ratio?" a long with "What do you remember of proportion?"
- Discuss the journaling responses
- Students will be paired and assigned the first poster.
- Students will respond to the statements or questions in writing at each poster.
- A timed response (4 to 5 minutes) at each poster, allowing circulation around the room to happen within 30 minutes.
- As a whole group we will discuss differing viewpoints.
- Students will apply knowledge by filling out Frayer Model ring cards.

**Handouts:** Frayer Model on ring cards

# LIMSST Project Literacy Lesson Reflection Form

108

Name: [REDACTED]

Date lesson was taught: 3/24/09

Lesson Title/Topic Areas: Ratio and Proportion

## Literacy Strategies Used: Reading/Writing/Discussion.

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

I decided to use a pair silent discussion allowing students to engage in a dialogue with one another. The specific topic was ratio and proportion and how to apply to one another. This provided an opportunity for students to express opinions and discuss definitions and application. This lesson engaged students in reading and stimulated class discussion. The lesson introduced students to new key concepts and unified the relationship between ratio and proportion.

## 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)

This strategy was effective in stimulating class discussion and engaging student to defend positions and expressions. I have used the silent discussion before, this was the first time they were able to discuss and problem solve between partners before expressing their opinion.

This lesson worked very well, they had engaging conversation and quiet conversation before the expressed the pair's opinion. It really worked well, but I also strategically pair them.

## 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?)

This was a great way to introduce and review these terms/concepts. The students enjoyed walking around the room. The movement and standing seem to spur some great conversation. They didn't seem lethargic with the discussions, they were able to stay on task and appreciate the chance to move around the room.

I have continued to use this method in all my classes. I will use this next year, after I get a handle on classroom management... I believe the reason for the success is good classroom management, I think that this method could become a nightmare if not properly thought out and planned.

## 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 have used this method, silent discussion as a seat activity with the questions moving round to different students. I believe they benefitted more from the movement and working corporately with one another.