

Lesson Plan
(Second Unit Lesson)

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Name: [REDACTED] Course: Pre-Algebra Grade: 8th grade

Unit: Ratio and Proportion

Big Idea: Students will extend their knowledge by defining and applying ratios and proportions to debating the difference between metric and standard units.

Sub concept: By using ratios and proportions the learner will debate the differences between metric and standard measurement.

Literacy Strategy(s): Oral Discussion/Persuasive Writing

Lesson: "The Great Debate"

(Standard Measurement vs. Metric Measurement) **Date Taught:** 4/7/09

Learning Objective(s):

- Students will find the relevancy of ratios and proportions.
- Students will use previous learning to communicate their position while debating.
- Students will be able to participate in a debate.

Idaho Standards:

Standard 2: Concepts and Principles of Measurement

- Goal2.2: 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 pick either standard or metric units.
- The students will fill out a rubric as support to their position.
- Students will be divided into groups according to specific reasoning and quality of support.
- Groups will assign roles (manager, time keeper, recorder, and reporter/speaker).
- Each assigned role will be recorded as an assignment.
- Groups will gather ratios and proportional evidence.
- Using ratio and proportion the students will demonstrate their defensive arguments.
- 5 Minutes to present/2 minutes to debate

LIMSST Project Literacy Lesson Reflection Form

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Name: [REDACTED]

Date lesson was taught: April 7, 2209

Lesson Title/Topic Areas: The Great Debate (Standard vs. Metric Measurement)

Literacy Strategies Used: .Please discuss what literacy strategies you embedded in this lesson. What were your goals in using these strategies?)

I decided to use a debate to encourage group participation and valid student's reasoning. My goal was to give students the opportunity to discuss the difference between metric and standard measurement giving evidence by using ratios and proportion as illustrations.

This lesson gave students a great occasion to openly discuss and persuade using prior knowledge.

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 stirring a debate and having students collaborate evidence to support their stance. The lesson was too limiting, it needed to be broader. The students were debating other issues about standard and metric that didn't actually have anything to do with ratios and/or proportions.

The debate as a whole was a good idea. It gave them purpose to participate as a group, assigning specific jobs within the group was beneficial. They actually used other sources (textbooks and internet) to support their claims.

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 lesson took a lot of preparation and management skills. I will format the debate differently next time, not so narrowly focused. This lesson needed more support, maybe a few of journal prompts, brief lesson on the topic, and a more in depth written conclusion.

This lesson has given me more ideas of how to improve it. It was a great way to stimulate oral discussion and whole classroom participation. I do believe that it needs further development, but overall it was a successful lesson.

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 never considered a debate, I thought that the subject would be limiting. The students proved me wrong the subjects debating are very broad, constraining it to ratio and proportional differences impaired the lesson.

The students loved to debate and take an active role within the groups. I believe that the debate has helped them recognize the metric and standard differences more than providing an occasion to practice using ratios and proportions.