

108
3/18/08

Introducing and Solving Inequalities

Big Picture: Inequality, in mathematics, is a statement that a mathematical expression is less than or greater than some other expression. Equations written in symbols $<$ (less than), $>$ (greater than), \leq (less than or equal to), and \geq (greater than or equal to) are used in place of the equals sign in expressions of inequalities. As in the case of equations, inequalities can be transformed in various ways. The direction of the inequality remains unchanged if some number is added to both sides or subtracted from both sides or if both sides are multiplied or divided by some positive number. Multiplication or division by a negative number reverses the sign of the inequality.

Objective: The learner will be able to demonstrate understanding of simple inequalities.

Language Objective:

- ✓ The student will read a demonstration letter.
- ✓ The student will outline ideas and write letters.
- ✓ The student will listen to peers responses.
- ✓ The student will speak aloud giving feedback.

Standards: Standard 3: Concepts and Language of Algebra and Functions

- ✓ 3.1 Use algebraic symbolism as a tool to represent mathematical relationships.
- ✓ 7.M.3.1.3 Use symbols; $<$ (less than), $>$ (greater than), \leq (less than or equal to), and \geq (greater than or equal to) to express relations.

Lesson Sequence:

- 1) Read a demonstration letter I provided.
- 2) Outline ideas (Brainstorm) that Mrs. McMaster would like to know.
- 3) Guided outline
- 4) Write letters.
- 5) Share letters.
- 6) Give feedback.

Assessment:

- ✓ Read final letters
- ✓ Give questions to elaborate on.

LIMSST Project Literacy Lesson Reflection Form

Date of Lesson: 3/18/08

Lesson Title/Topic Areas: Letters to the sixth grade teacher

Literacy Strategies Used:

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

This lesson the student will apply details, relevancy, and methods in discussing the objective being taught. The student had to clarify the objective they selected as well as make connections on how the students would benefit for learning this objective.

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)

Yes, this strategy is effective and brought self awareness to the students. With little guided practice and modeling the students (all abilities) were able to construct a letter. The letter provided additional understanding and self evaluation of objective.

The students value any lesson that provides opportunities for them to use their own voice. The letters gives us insight to their understanding of the concept that they will be teaching. Being able to express knowledge formally in a letter, is an expression of understanding and developing mastery of objective.

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?)

Those who are comfortable with the objective easily express their lesson and format. They are able to elaborate on methods, procedure and evaluation of objective.

The challenge is for those students who don't comprehend the objective which they are talking about. This method doesn't allow students to question and inquiry.

This lesson is a great evaluation tool; the student is able to articulate comprehension and illustrate prior knowledge. I will use this method as an assessment of an objective.

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?)

No, I haven't used this lesson before the LIMSST project. This lesson provided the opportunity to freely express knowledge using their voices. The student's comfort level is clearly expressed in the letters. Those students who had clear understanding wrote beautifully, and those who were unclear had difficulties expressing themselves in letter form.