# Lesson Plan: Peer Review

Lesson Date: September 28, 2012, 2nd hour

Number of students: 33

Teacher’s Name: Miss Loomis

**Materials:**

Sample paper (pdf) and projector

Students need their own paper, a pencil, and the rubric

**Objectives:**

Understand the benefits of peer review.

Practice the process of peer review.

**Benchmarks**:

9.1.1.1.3 Explain how the traditions and norms of science define the bounds of professional scientific practice and reveal instances of scientific error or misconduct. *For example:* The use of peer review

9.1.1.2.2 Evaluate the explanations proposed by others by examining and comparing evidence, identifying faulty reasoning, pointing out statements that go beyond the scientifically acceptable evidence, and suggesting alternative scientific explanations.

**Anticipatory Set:** (3 minutes)

Have a student hand out half sheets.

Enrichments (write on small white board)

Today we are going to go through the process of peer review aka constructive criticism.

Scientists do this to get published in journals,

With complete, anonymous strangers. They never meet in person.

They are brutal!

We are NOT going to be brutal, simply helpful

**Input: (2 minutes)**

Today you will be doing this first with a partner who was not in your group from the sowbug experiment. Then you will pair up with your partner and peer review one more time before having time to make changes to your paper.

-Switch papers

-Read it and mark

-Conference with partner so they can explain

**Modeling: (8 minutes)**

Project paper on screen

Questions to ask yourself (given to students on a halfsheet):

Could I repeat this experiment based on their description?

Is everything spelled correctly?

Are sources cited correctly? Are they good sources?

Does the author ever appear biased?

Was there support for the author’s conclusion?

Do their graphs make sense?

Was it everything in third person?

Does the paper meet the requirements on the rubric?

Look at rubric for each section

Check for MLA in-text citing and show students the website they can use to do this

This website is posted on moodle.

Model a peer review of the sample paper out loud

**Check for understanding: (2 minutes)**

Go over the directions on the board (We will do this twice today)

1. Find a partner who’s not in your sowbug group (2nd time with your partner)
2. Sit by them (bring your rubric, paper, pencil) (2nd time use a colored pencil)
3. Exchange papers, put your name at the top
4. Read silently and mark with a pencil
5. Switch and read the corrections on your own paper
6. Conference with your partner (begin with one compliment)
7. 2nd time: share what you learned from your other reviewer

Work time:

Make changes to your own paper

Ask questions!

Write stop times on board (1st peer review ~13 minutes, 2nd peer review ~7 minutes)

**Guided/Independent Practice: (25 min)**

Students will peer review with their partner while I walk around to observe and provide help when necessary.

**Closure: (5 min)**

Review

With your partner write down 4 reasons that we do peer review. (walk around and monitor)

Call on 4 groups until we’ve listed the reasons below.

Write on half the board

Target responses:

1. To make sure you conducted a well-designed experiment
2. A real live spelling/grammar checker
3. To make sure you didn’t leave anything out
4. To point out any bias

Final draft due Monday

Science project idea/proposal form due Monday

Bring water bottles for Ecology Unit (1L, clear)

See you next month!