Reflection: evaluating media messages

1. Why did you create this assignment? To assess a core goal of distinguishing science from pseudoscience (using a course learning outcome relating to evaluating media messages). To expose students to a particular type of media message on the web that is full of common misinterpretations of global warming.

2. Have you given this assignment before? Yes, but not in the context of this new learning outcome. I have had students work on two different ways of evaluating secondary sources. This required the integration of both ways (evidence criteria & criteria for valid hypothesis testing). They have the most trouble with the written line of reasoning, especially with inferences drawn from evidence and with determining evidence that would be necessary to validate a claim.

3. How does this assignment relate to the rest of what you are teaching? The article is directly related to cellular respiration, photosynthesis, greenhouse effect, and global warming course work. The assignment itself had been done in smaller parts with different articles relating to other subjects. This assignment will help assess the following course leaning outcomes:
   a. Evaluating media messages...
   b. Make informed decisions...?
   c. Structure and function?

4. What skills will student need to have or develop to successfully complete this assignment? Identify/distinguish evidence from inference as non-science majors, most are starting from scratch. Distinguishing evidence based on claims/inferences from unfounded claims. Pay attention to detail. Follow instructions. Valid hypothesis testing. But all have been exposed to media messages all their lives and have at least some skill at recognizing fact from fiction even if their methodology is not articulated or they are not cognitive of it. I think it is important that they at least develop an awareness of why or why not they believe the claim to be valid. I can only stress the importance to the assignment that they read carefully and follow instructions. Use course material, recognize evidence, valid hypothesis testing, writing skills.

5. What exactly is the task assigned? See assignment description.

6. What evidence will demonstrate students’ knowledge and skills regarding this assignment? Identify the major claims of the article, lack of evidence. Identify the type of evidence that is needed but lacking in the article. Correct determination that the claims are not based on valid hypothesis testing. Identify faulty scientific information/ or misinterpretation.
   a. Clear writing
   b. Consistent arguments

7. What are the highest expectations you have for student performance on this assignment overall? Deem that most of the claims on the article are invalid due to insufficient evidence (statement of additional evidence needed to judge the claims) and lack of valid hypothesis testing and unsound scientific principles (role of CR & Ps in global carbon cycle).

8. What is the worst fulfillment of the assignment you can imagine, short of simply not turning it in at all? No attempt at a written line of reasoning. No use their course work. Poor writing skills.