Climate Change Collection Scorecard

Date: January 30, 2005
Reviewer: Jack Ganse
Name of resource: UCAR: What Is the Carbon Cycle?
Sponsoring Organization: UCAR LEARN
URL: http://www.ucar.edu/learn/1_4_2_15t.htm
Site Homepage: http://www.ucar.edu/learn

RESOURCE WITHIN A SITE?  Y /  N
FOUND THROUGH DLESE?  Y /  N
IF SO, WHICH COLLECTIONS? DLESE Community Collection (DCC), Community Review System (CRS)

RECOMMENDATION  YES  YES WITH RESERVATIONS  NO
STARS  1  2  3  4  5 (LAME TO STELLAR)

NARRATIVE (USE OTHER SIDE IF NEEDED) This site provides background information about the carbon cycle, including sources and sinks as well as a diagram of the carbon cycle. Questions for student discussion are provided, and an activity in which students illustrate the carbon cycle is outlined.

INTENDED USE
_ X_ REFERENCE
_ X_ COMPUTER ACTIVITY
_ X_ NON-COMPUTER ACTIVITY
         EDUCATOR, LEARNER OR BOTH (CIRCLE) IF FOR LEARNER, EVIDENCE ITS BEEN TESTED?  Y /  N
         BEGINNER OR ADVANCED (CIRCLE)

Easily Printed?  Y /  N

BUGS & TECHNICAL DIFFICULTIES (PROBLEMATIC TO ROBUST)
1  2  3  4
COMMENTS: I was hoping the small carbon cycle diagram would be linked to a large, one-page diagram useful for printing.

SCIENTIFIC ACCURACY- FACTUAL ERRORS/OMISSIONS (NATIONAL ENQUIRER TO NATIONAL GEOGRAPHIC)
1  2  3  4
EVIDENCE IT HAS BEEN REVIEWED FOR ACCURACY?  Y /  N
COMMENTS: There is one scientific reference provided as well as references to science standards.

PEDAGOGICAL INFORMATION
_ X_ REFERENCE ONLY
_ X_ TEACHER GUIDE
_ X_ MATERIALS LIST
_ X_ ASSESSMENT STRATEGIES
_ X_ TIMEFRAME PROVIDED
_ X_ STANDARDS ALIGNMENT INDICATED

PROMOTES STUDENT LEARNING (WEAK TO STRONG)
1  2  3  4
COMMENTS: This resource provides decent questions for classroom discussion about the carbon cycle. Students would generally be engaged in producing their own version of a carbon cycle diagram.

APPROPRIATE/EFFECTIVE MULTIMEDIA DESIGN (WEAK TO STRONG)
1  2  3  4
COMMENTS: The connection between the text and graphics could be strengthened. As it is, the graphics are somewhat detached from the text—it is not obvious that they support the text. Pretty basic HTML styling.

VISUAL APPEAL (WEAK TO STRONG)
1  2  3  4
COMMENTS: Basic, no frills site. Some animations and better graphics would benefit the site.

TEACHING TIPS: ANNOTATION DESCRIBING HOW SITE COULD BE USED OR ADAPTED FOR CLASSROOM:
These types of activities benefit from a classroom supply of old magazines that can be cut up for pictures (old National Geographics are terrific for this). To make a math/science connection with older students, use actual carbon cycle data with the activity (cycle quantities and cycle times). Look for carbon cycle animations on the internet, or have your tech savvy students animate their own carbon cycle using Flash, for example.

RECOMMENDATION: ANNOTATION DESCRIBING HOW THE DEVELOPER COULD IMPROVE THE SITE.
References to “CO₂” in the text should be re-coded as letters and numbers—it is not difficult to use subscripts in HTML. The teacher guide should be available in PDF format for optimal printing. Add graphics and/or animations to better support the background information. Provide a link to a full-page, printable carbon cycle diagram. Data to accompany the carbon cycle diagram would be useful for older students to analyze.

Revised 12/3/04