**Review exercise for Introduction to Environmental Science**

I use this exercise on the last day of Introduction to Environmental Science as a way to help students review for the exam, but also to make sure they are able to see the connections between the different sections of the course. Although this exercise could be modified to fit many topics, the main topics we cover during the semester are:

1. Biodiversity
2. Human population growth
3. Energy
4. Water availability and pollution
5. Climate change

Begin by asking students to form five groups of similar size. This works well with class sizes under 25- any more than 5 per group and you should probably consider splitting the class in half and running two separate exercises. Assign each group to a topic from class (this assumes five topics), and ask them to brainstorm specific ways that their topic relates to the other four topics in the class. Give them a large (2’ x 3’) piece of paper and markers, and about 25 minutes to work. As they work, walk around the class talking to/checking in on each group.

While they work, put the 5 topics on the board arranged in roughly a circle:

As groups seem to be winding down in their brainstorming, ask them to come up to the board and write short words/phrases connecting their topic to the other four (you can use lines connecting each one, or color coding, etc. to keep things organized). As all the groups do this, you can tell them not to duplicate if something is already up, but as long as your board is big enough it doesn’t really matter. This part of the activity can lead to a logjam at the board if all groups are trying to write at the same time. Have each group send one representative, and try to stagger the groups.

Once all the groups have contributed the ideas from their brainstorm, you can look at the figure as a class. One option (if there’s still time) is to go through each connection and ask students to explain it in a few sentences. This also usually leads to suggestions of a few additional points that were missed. If necessary, the instructor can also ask questions to get at any other missing links.

This typically covers the major points covered in class, but it doesn’t get into much depth about any of them. It is a good review exercise, and relies heavily on students having enough specific knowledge about each topic to be able to see the less obvious connections. One potential difficulty is if students want to ‘take home’ the diagram. If you’re using a SmartBoard this is easy, but otherwise it takes a long time for students to copy the whole diagram. One option would be a digital photograph, and another would be to designate one student as a secretary responsible for recording and sharing the final product with the class.