

ESS 502 The Solid Earth

Active Learning Model

Below is a general description of the organization we will use throughout the quarter. For the first paper, by Vine and Matthews, we will only do the first step of the process: You will each read the paper carefully and write down the answers to the questions in Assignment #1. Then, in class you will meet in groups of 2 or 3 to discuss your answers with each other to come to a consensus. It will be important to be clear on the answers you understand, and to elucidate what you do not understand.

The theory is that you will learn more by being actively involved in the process than if you passively listen. From my own experience, I discovered how little I knew when I first started teaching classes that I had recently taken a graduate student. The best way to learn something is to try to explain it to someone else. So the expectation is that you will learn a lot about the papers you present and perhaps less about the ones that are explained to you. By thinking about and giving positive criticism to others in the class it will improve the clarity of your own speaking styles. It is the responsibility of both the listener and the speaker to insure that the main points of the papers are made clear.

Divide into three reading groups (1, 2, and 3) with 2 or 3 people per group. Before class each reading group reads one paper carefully and meets to decide both on the main points of the paper and on how to present them. For some papers, we will provide specific or general questions to help focus your discussion.

In class you will break into three new discussion groups. Each discussion group will consist of members from different reading groups.

For example, if the first discussion group has one member from each of the three reading groups then during the first 15 minutes of class the person from reading group 1 explains the paper, with all possible clarity, to the person from reading group 2, while the person from reading group 3 writes a critique of the speaker. The person from reading group 2 will write notes on the main points that were presented. We will rotate through this process every 15 minutes so everyone has an opportunity to speak, to write a summary and to write a critique. With 8 students, one of the discussion groups will have only 2 people. During the first 2 15-minute sessions they explain their papers to each other and write summaries. During the last 15 minute period they join the other two groups and write critiques.

The summaries should include the name of the speaker and note taker, and a brief summary of the main points of the paper.

The critique should include the name of the speaker and evaluator. It should be in the form of constructive criticism. What was especially clear, what was confusing, what method/style was most effective to your learning/understanding and what got in the way.