

Understand a Discipline in a Day:
Sharing Sessions for Learning Efficiency and Collaborative Knowledge Generation

Assignment Background:

Motivation Behind Creating This Assignment

Undergraduate students in science-oriented courses are not often exposed to the historical development of their disciplines. Typical course foci are those topics, theories and methods that relate to the current state of knowledge in the field. However, as is often understood and translated into learning opportunities at the graduate level, familiarity with disciplinary development provides important theoretical grounding, and allows for deeper interpretation and analysis of course-related topics. As the instructor of 3rd year Biogeography, I wanted not just the breadth that would come from this, my Department's survey course in the discipline, but also the depth of understanding required for students to carry out rich analyses of timely, policy-relevant topics related to the field.

Constraints

I considered familiarity with the historical development and foundations of our discipline to be essential, but this one topic area could not consume a great deal of class time. Biogeography is a synthetic discipline requiring understandings from a wide range of fields, and - as mentioned above - my course was the only one of its kind in my Department. In combination, these factors meant that I was tasked with covering significant content. The question became: how do I incorporate 'extra' material into a justifiably content-heavy course?

The Solution

I devised a system of efficiently and effectively covering significant amounts of information in a short period of time, based on the collaborative efforts of students, via what I termed 'sharing sessions'.

How To Run a Sharing Session:

The process of running a sharing session involved dividing my 20 students into 4 equal-sized groups. This exercise was based on *Foundations of Biogeography: Classic Papers with Commentaries*: a 1328-page, 8-part book. All students were assigned, for their course readings over two weeks, the introductions to the book's 8 sections (approximately 90 pages). 4 parts of the book were selected for the sharing session exercise, and a group of 5 students was responsible for each of these parts. Each of the 5 students responsible for a particular book section was required to read one article from his/her section – as well as being familiar with the introduction to his/her section of the book. In our in-class sharing session, each group discussed and compared their selected papers in approximately 30 minutes; they related their papers to the theme of their section of the book, came up with 3-5 main messages they wanted to share with their peers, and provided a brief group presentation to the class on these main messages. In the second half of our 2-hour session, one expert from each group joined together to form a new group. Each of these 5 new groups carried out a similar exercise. In this instance, however, individuals had a chance to discuss and analyze the discipline's development with 'experts' from a different topic area

than their own, thus deepening their exposure to material with which they may not otherwise have become as familiar.

Preparing the Students:

To provide clarity around the purpose of this exercise and how it was to be carried out, the following was communicated to students before the in-class exercise (modified from original handouts):

Background and Objectives:

This exercise represents an opportunity for you to develop a number of important skills, including: efficient information-gathering; sharing verbally with your peers; collaboratively generating knowledge; contributing to an intellectually stimulating, but inclusive learning environment; and learning to solve problems in real time using a variety of methods. More specifically, the objective of this assignment is to provide an opportunity for you to work with your peers on: 1) understanding the development of Biogeography as a discipline; 2) gaining familiarity with key thinkers and watershed moments in the field; 3) gaining an understanding of the linkages between biogeography and the disciplines on which it draws. Each sharing session carries a base mark of 1% of your overall grade in this course. Additional evaluation of your course participation is allocated to these sessions as well. (A section entitled "Expectations/Evaluation Criteria" provided students with clarity around how to do well in the exercise).

Assignment Description:

The Introduction to the book, and the introduction to each Part of the book, have been scanned and uploaded to our course website. You will be responsible for photocopying the article of your choice. *The book is divided into eight sections. Each section has a number of original articles written by scholars influential in the development of Biogeography. Some of these papers can be challenging reading, and there are many of them. To minimize the workload for any one of you, but to still gain the benefit of a breadth of research, we will split up the readings. In our Sharing Session, you will help your peers to understand what you gained from your individual research. To **prepare for this Sharing Session**, you and your peers will need to **join forces, and divide your research**. In this case, join with 4 other students and **select one of the following sections** from the book...(the sections, with a brief description of each, were listed). Students were then informed of expectations, and the exercise's structure, as outlined above.*

Assignment Evaluation

Evaluation was carried out in the following ways: 1) I sat for a few minutes with each group, listening in on discussions; I evaluated whether each student had clearly completed his/her readings and was actively contributing to knowledge production; 2) I observed, during the brief group presentation, the contribution of each group member, and the level of effort s/he put towards grappling with the material and articulating main messages to the class. I gave students the base 1% mark if effective participation in this session was demonstrated, and broke down the additional 1% into a mark between 1 and 4 for the additional criteria detailed above. This assignment had a low weight associated with it, as my intention was to use this exercise as an opportunity (early in the semester) for students not only to gain information, but also to engage with each other and practice their presentation skills in a low stakes environment – i.e. to build skills, confidence and community. I consider this session to have been a successful means of capitalizing on opportunities for collaborative knowledge generation, creating peer-peer connections, efficiently exposing students to significant amounts of important information, and increasing uptake and retention of information by having students teach each other.