

Summary of GSTTS 11-6-12

This time, we discussed collaborative learning. The take-away message is that in-class collaborative learning can have tremendous benefits for your students, but takes some time setting up. Of course, investing some time at the beginning can pay off in having to spend less time re-explaining concepts in office hours and students performing better on exams and quizzes.

We have assumed many of the graduate students do not have experience in organizing in-class group learning exercises. The thing to keep in mind is that students may be at first resistant to the idea of group learning. You may have a bimodal distribution of such students: those that don't want to do it because they know they will get stuck doing a majority of the work and those that don't want to do it because they don't want to do work. The goal of this seminar was to show the graduate students how to motivate all of the students to be involved and improve the overall understanding of the material.

Groups can be organized as follows: in pairs or in groups of four.

The benefit to pairs is that there is increased accountability. No one can slack on their work without the other group member knowing. Also, it's much easier to arrange meeting times outside of class if the in-class work requires out-of-class work, as well. If pairs change each time, then one does not have to worry about someone dropping the course and leaving someone without a partner for the rest of the semester.

The benefit to groups of 4 is that over the course of the semester, if one of the group members drop, then the group is not diminished to just one person. Also, a larger group can sometimes have more productive brain-storming sessions.

We had a few articles describing how to establish bonds between group members and the various ways to increase positive/productive group dynamics over the course of a semester. Such techniques are useful for base-groups (groups of 4 or so).

When forming base-groups, it helps to have a diverse mix of people. As mixed as possible: ethnicity, skill, gender (studies show that having at least as many females as males provides for a setting where females feel more comfortable and perform better than more males than females in a group.) Also, it helps to not have skill levels among group members be too far apart.

Group skills

Help groups establish roles and identify the skills of each member. Some people are more comfortable with certain tasks and each group member should feel as if they are making a significant contribution.

Help groups establish positive interdependence and personal accountability.

How to grade group work

Everyone can turn in his or her own write-up. Then, you can either grade each one individually and assign an individual grade to each person, or you can pick one of the write-ups from one of the group members and grade it. Then assign this grade to every group member. The latter grading technique, if told to the students before hand, can potentially lead to everyone doing a better job on his or her write-up because they don't know whose write-up will be chosen as the representative write-up.