

Seminar 6: Active Learning Methods  
Tuesday, October 28, 2014

### Summary

During this session we covered active learning. We started with an open large group discussion about personal experiences with group work and why teachers should consider including active learning in their classes. Then we briefly presented some published research data that can be used to show active learning is an effective technique and discussed how this is a “hot” topic in education.

Next we split the class into 5 groups. Each was assigned one of the active learning methods described in a handout. Groups read and discussed the method, summarized it, and came up with a specific example of how this method could be included in a calculus recitation. Each group recorded their summary and example on the board. Then as a large group we invited the class to brainstorm additional ideas.

After a break we formed four new groups comprised of one member each from the original groups. They were tasked with creating an outline for the flow of a recitation meeting that included, in detail, at least one active learning component. To avoid overlap they each had a different focus: going over homework, general practice, exam review, and group quiz. They presented their ideas using the document camera and then we scanned and shared via email all of the outlines.

### Reflection

Based on the discussion from last year, I was anticipating that people would share more negative personal experiences with group work. However, few people shared bad (or good) experiences. Instead people shared the reasons why group work can be beneficial. We used the handout of 5 active learning techniques from last year. However, there is a lot of overlap between the five methods. In future semesters it would be worth finding a more varied reference as an introduction. There were not a lot of ideas offered during our open brainstorming session, perhaps a better selection of examples would have expanded this discussion.

The final groups came up with some good outlines that could be easily implemented in recitation. Most of the ideas reflected the earlier class discussions. However the “group quiz” team had a fresh idea. They suggested giving pairs of students 5 minutes to discuss the questions then having the students work separately on writing up the answers. It was good to have a final product for the group work. When we have open ended discussion there is less participation.