USC CENTER FOR EXCELLENCE IN TEACHING
ACTIVE LEARNING WORKSHOP: Focus on Group Work
September 25, 2012

Using group work as a tool for active learning

What are some benefits of group work?
- Group work encourages greater participation and involvement from every student
- Certain types of group work make students responsible for each other’s learning
- When done well, group work can be a very effective use of limited classroom time

How can I use group work effectively in my classroom?
- How to create groups?
  o Consider assigning students to stable groups that are the same throughout the semester. This gives students as sense of accountability to each other.
  o Consider using random or teacher-selected assignments. This avoids cliques and encourages students to interact with classmates they might not otherwise engage with.
  o TIP for creating stable groups: Give students a one-question survey asking them what best describes their experience of group work. Put students who self-report “doing all the work” in the same group. They might find this to be the first time they are really challenged and satisfied by group work.

- How big should groups be?
  o More than 4 or 5 students is not ideal, as some students are likely to stop participating
  o Pairs of students work well for quick group work (1-minute brainstorming or problem solving, for example)

- How should group work be structured?
  o Tell students what the objective of the group work is. (If you don’t know what it is—reconsider why and when you’re using group work!)
  o Give students very specific instructions. Use concrete terms; don’t just say “discuss X.”
  o Set a time limit; tell students what the limit is and warn the class when it is approaching
  o Have a sponge activity: a specific task to talk about or work on if groups finish early
  o Specify a method of reporting out to the class

Some examples of structured group activities:

1. Roundtable: Divide the class into small groups. Pose an open-ended question and give students a minute to think about answers. Then have the students go around in a circle, sharing their answers. (Students are allowed to “pass.”) One option: have students write answers down on a sheet of paper that gets passed around; another: have them share answers verbally with one student recording answers.
   Benefits: getting everyone participating immediately in a fast, low-stakes manner; brainstorming; generating more ideas as a group than an individual student might be able to on his or her own

2. Think-Pair-Share: First, individuals think for a moment about a specific question posed by the instructor. Second, they then pair up and share responses with the paired fellow. They should critique or ask questions about each other’s responses, where appropriate. Third step, the pairs share their joint response with their larger groups or with the class.
   Benefits: Think-Pair-Share structures discussion simply. Students follow a prescribed process that limits off-task thinking and off-task behavior. Accountability is built in because every student must report to a partner, and partners must report to a larger group. A designated and demarcated time to think before being allowed to speak prevents over-eager students from monopolizing discussion.
3. **Pro-Con-Caveat:** Students fill out a “Pro-Con-Caveat” grid for homework (distributed as a blank sheet previously or by email/Blackboard). They list considerations for/against an identified argument or position and caveats that must be considered. Students bring a copy of their grid to class and then work in groups to create a grid with what they view as the best ideas from each pro, con, and caveat column and then report to class. (Instructor may make a final grid on board/overhead, drawing from each group.)

*Benefits:* ensures preparation and encourages reflection on issues before class, promotes higher-order thinking when students make judgments about which pros, cons, and caveats are most important.

4. **Three-step interview:** Students are in pairs. They have a set of specific questions. Student A asks B the questions. After a short, set amount of time, they reverse. Students either report their partner’s answers back to their larger groups, or volunteers share their partner’s answers with the large group.

*Benefits:* having responsibility for reporting on partner’s answers encourages close, active listening.

5. **Jigsaw:** Each member of a group is assigned unique material to learn and teach to the group’s other members. Students from different groups working on the same material get together during class to decide what is most important in their material, and how best to teach it. (The instructor may check-in with each expert group to ensure they are on track.) After practicing in the ‘expert’ groups, the original groups reform and the students teach each other.

*Benefits:* students learn by teaching each other.

6. **Double-entry journal:** This strategy enables students to record their responses to text as they read. The page of a journal is divided into two columns. On the left, students summarize what they have read. On the right, they record their reactions: questions, objections, confusions, etc. In class, students pair up and give feedback on each other’s double-entry journals. (This feedback may be written or oral. A third column may be added as a space for the partner to write comments.) *Option:* the instructor can collect the journals and offer feedback of her or his own.

*Benefits:* Creating a double-entry journal encourages meta-cognitive thinking about one’s own learning. Trading journals provides opportunity to practice giving and receiving peer feedback. The repetition (completing the journal on your own, receiving feedback from a peer, and potentially receiving feedback from instructor) encourages deep learning.

7. **Three stay one stray:** This is a technique for having groups report out results of discussion when there is no time to hear from each group. Groups are given a problem to solve and told to ensure that everyone in the group understands the solution that the group has come up with. Then one member of each group is selected to "stray" by going to the next group. At the new group, the “straying” student briefs the three who remained about the findings of the student's original group. Each group, in other words, learns the findings of another group and has its findings reported to another group. It is important that students who will be reporting out not know who they are until the last minute, so that each member of the group must be ready to represent the group’s position. In the last rotation, the “strayer” returns to the home group. Students in home group then tell the strayer what they have learned from other groups.

*Benefits:* Students must pay close attention because anyone might be chosen as the strayer. Students learn by teaching. Sends the message that knowledge lies within the learning community and not only with the instructor as authority figure. Finally, it is time-efficient, avoiding time spent having each group report out to the entire class.
Forms of Active Learning (see Faust and Paulson, but other sources listed below list these and more or variant AL forms)

For Individual Students

One-minute paper
Muddiest point
Clearest point
Affective response
Daily journal
Reading quiz
Clarification pauses
Response to demonstration or other instructor-centered activity

Questions and Answers

Socratic method
Wait time
Student summary of another student’s answer
Fish bowl
Quiz/test questions

Immediate Feedback

Finger signals
Flash cards
Quotations

Critical Thinking Motivators

Pre-theoretic intuitions quiz
Puzzles/paradoxes
Share/pair
Discussion
Note check: students compare/share notes
Evaluation of another student’s work
Cooperative groups in class
Active review sessions
Work at the blackboard
Concept mapping
Visual lists
Jigsaw group projects
Role playing
Panel discussions
Debates
Games
Resources:

From the Teaching Guide for Graduate Student Instructors, UC-Berkeley:

Group work: http://gsi.berkeley.edu/teachingguide/sections/groupwork.html

Strategies for active learning—class debate, peer instruction, case studies, role-playing, etc.: http://gsi.berkeley.edu/teachingguide/sections/active.html#class

Examples of structured group work (elementary education but adaptable): http://w4.nkcsd.k12.mo.us/~kcofer/social_cooperative_structures.htm

Barbara Millis, "Ideas for Graduate Student Instructors: Basic Cooperative Learning Structures," Division of Instructional Innovation and Instruction, University of Texas at Austin, 19 January 2008 http://www.utexas.edu/academic/diia/gsi/coursedesign/basic.php

Instructional strategies online: http://olc.spsd.sk.ca/DE/PD/instr/intera.html

University of Minnesota Center for Teaching and Learning http://www1.umn.edu/ohr/teachlearn/resources/active/index.html [Exceptionally rich website]

"The Evolution of a Biology Course: From Student Passivity to Student Accountability" by Judy Moore and Eric Mould. [See this and other AL discussions and resources at: http://www1.umn.edu/ohr/teachlearn/tutorials/active/resources/index.html ]


Video demonstration of how clickers and other audience response systems work: http://lawmedia.usc.edu/mediasite/Viewer/?peid=41705b889b594ea0af8801ff3231f938 [Presentation by Turning Technologies to USC law school faculty and staff in June 2012. Informative.]

USC’s CET Website

cet.usc.edu

http://cet.usc.edu/resources/teaching_learning/active_learning.html [A helpful list of websites and other resources]

http://capture.usc.edu/Mediasite/Play/88edb9bcaebb4371a0adc9d436afef5d1d [A video-capture of a CET active-learning workshop in 2012]