Group Work – Strategies
Source: Adapted from the draft of MAA’s Instructional Practices Guide

Collaborative Learning Strategies
Collaborative learning and cooperative learning are terms used interchangeably at times, but the meaning of the terms differ somewhat. Collaborative learning typically refers to learning that takes place as small groups of students focus on open-ended, complex tasks, whereas cooperative learning typically refers to more structured, small group learning that focuses on foundational or traditional knowledge with group roles (e.g. facilitator, summarizer, recorder, presenter) that may also serve to help students learn to work in groups (cf. Cooper and Robinson, 1997; Smith and MacGregor, 1992).

Johnson and Johnson (1999) indicate five basic elements essential for successful cooperative learning:

1. **Positive interdependence:** Group interaction is necessary for successful resolution of the question or task, linking individual success and the success of the group. For example, students work on a task together, but submit only one group response orally or in writing, or a task is broken into parts completed by individuals and the individual work is needed for a group resolution.

2. **Face-to-face interaction:** Group interactions include discussing solution paths, important concepts, and connections to prior knowledge and facilitating words of encouragement and help when needed. For example, when a student asks the instructor, “Is this right?” the instructor can redirect their question to the group and ask for input from others in the group for validation.

3. **Individual accountability:** Students are held accountable for their share of the work in the group. For example, a portion of a student’s grade for work in a group may depend on an individual quiz given at the end of the activity, or there may be questions in a task the must be answered individually.

4. **Social skills:** Group interaction requires interpersonal, social, and collaborative skills. Students must be provided guidance in how to effectively interact in a small group. For example, a class discussion of appropriate group behaviors and expected norms of communication is an essential precursor to implementing successful cooperative learning. Providing a handout listing these behaviors and reminding students of these expectations for group interaction throughout the term is also important.

5. **Group processing:** Group members discuss effectiveness in reaching their goals and in working together. For example, students should be given time to reflect on prompts such as, “What I liked most about this group was…” or, “Our effectiveness as a group could be improved by…,” and then the students should discuss their responses in the group. It also may be helpful for the instructor to collect these reflections.
Implementing collaborative or cooperative learning strategies successfully relies heavily on assigning groups of an appropriate size and with your students and task in mind. For some strategies, pairing students in groups of two by proximity is appropriate. For other strategies, a group size of no more than three students is ideal because, by nature of the size of the group, all students have more opportunities to contribute to group discussions than they would in a larger group in which less assertive students may not have ample opportunities to contribute. Sometimes it is appropriate to randomly assign groups and other times it is appropriate to assign groups by thinking carefully about the task to be completed and the skills each student will bring to the task. For example, in a class of 40 students, providing students with a diagram of the classroom set up (i.e. location of groups 1-13) and pre-assigning groups so that students know where to go at the beginning of class is preferable to an ad-hoc approach of having students count off from 1 to 13 and then “find” their groups. The latter also does not allow for placing students in groups based upon performance on homework or other factors that may influence group dynamics.

**Small Group Work**
Cooperative or collaborative learning must involve small groups, and there are many ways to incorporate small group work into the classroom. If grouping students based on performance, it is important to place low-performing students with medium-performing students and then medium-performing students with high-performing students. This practice provides the best opportunity for students to work together and grow in their learning. It is best to avoid placing low-performing students with high-performing ones.

The following is a list of more tips for grouping students:

- Balance student personalities so that more introverted students are grouped with more extroverted students.
- Regroup students often so that students can work with many others in the class.
- Use different grouping strategies, such as using random generators, drawing from a deck of cards (all aces together, etc.), assigning groups based on the order in which students entered class, etc.
- Use more strategic approaches, such as grouping based on declared majors or interests, class performance, or other knowledge of the students.
- Avoid allowing students to remain in groups when the dynamic of the group impedes student learning. This is a good time to regroup!

Effective small group learning should incorporate tasks or questions that involve the five critical elements: positive interdependence, face-to-face interactions, individual accountability, social skills, and group processing.

The basic idea is that students work on tasks in small groups of typically 3-4 students. In a more structured cooperative setting, students may be assigned roles in their groups such as facilitator, summarizer, recorder, and presenter. During this work, the instructor typically listens to the discussions and engages with different groups in a variety of ways, such as asking guiding questions or redirecting students’ inquiries. Often a period of group work is followed by group presentations to the entire class, and the instructor may use the presented work to draw out important topics, to make connections, or to lead into subsequent material.