## Important General Information

In forming cooperative groups, the following situations must be addressed. There are no "right" answers. A cooperative classroom depends on the subject, nature of the room, time available, participants and more. The active-learning teacher must be willing to change strategy based on the situation.

Dealing with opposition to group work. What if a student is opposed to working with others in groups? This usually follows a bad past experience. In such cases, talk to them and suggest that this experience might be different because of the precautionary structures in place. Suggest that they try it out for a few weeks. If at the end of that time, they still feel uncomfortable working in a group, let them work alone. They are still responsible for all the assignments.

Age appropriateness. The nature of groups and tasks they are assigned depends on the age of the participants. Older participants may be more resistant to assigned roles. While they may have more entrenched personality traits that challenge the group structure, they are also more likely to have highly developed small group skills and can thus resolve tensions without outside (i.e., instructor) intervention. Hence unstructured groups may be better older persons.

Physical resources. The arrangement of the room and furniture affects successful group work. Ideally, tables with chairs should be movable so groups can sit and face each other while working. Table size should make it easy to talk across the table without feeling constricted.

Management of groups. Inevitably friction amongst group members will exist. It takes time for people to develop the skills of working together harmoniously. Because the active-learning classroom should make people independent learners, the instructor should avoid rushing in and over-managing. As far as possible, the group should learn to resolve issues amongst themselves. If the instructor intervenes, the occasion should be used not just to solve the immediate problem, but to model problem resolution.

Frequency of group changes. Group changes can occur at agreed upon intervals (every week or month or semester) or at the beginning of a new curriculum topic. Groups can also be changed, as a last resort, because of problems within a group.

Group transitions Groups bond and develop loyalties surprisingly quickly. Therefore, group transitions should be announced well in advance. That will give the old group time to make their farewells and for the new group to get to know each other using icebreakers if necessary.

Grading philosophy. Collaborative group work succeeds only if everyone perceives a benefit in getting all group members to succeed. Hence, it should be apparent that any grading scheme that assigns grades on a norm-referenced basis (i.e., 'on a curve' where the number of high grades is limited) would work against successful group work. After all, why should one student help another to learn if the latter's success will work against the former? I strongly believe that collaborative groups will succeed only if grades are criterion-referenced (i.e., a student's grade only depends on what he or she can do and not on how the rest of the class performs).

