Designing Group Assignments That Work

The most common student response to group work is fear and loathing: “How much of my time will this take? What if the others won’t do any work? Will I be penalized by my group’s failure? How will we ever find time to meet?” To be truthful, these perceptions are somewhat justified, as many students’ experience with group work has left them with unpleasant memories of the experience.

But there is another, equally valid perspective on learning through collaboration. Effectively designed group assignments have the ability to promote the deep learning and intense engagement that we want to see in our classrooms. It is quite common for students to report that their fondest and richest memories of university involved working with other students on tasks that required collaboration. The question is how to create these experiences more predictably and consistently.

In the now-classic article, Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development (1997), Michaelsen, Fink and Knight lay out the principles that can help any university teacher reap the rewards of greater student engagement, complex learning and the teamwork skills needed for professional success. Read on for a summary of their ideas on how to promote effective group work.

Weeding out Problems with Group Work

When we examine the outcomes of group assignments there are three common problems that may occur:

1. One or two vocal students do all the talking, while others hold back and engage in “social loafing.”
2. Groups get sidetracked on inconsequential or irrelevant details & stray off-task.
3. Follow-up, whole-class discussions “fall flat,” even when there has been lots of participation in the small groups.

The first problem in particular can be especially frustrating, and it’s easy to attribute this phenomenon to variations in levels of student motivation or interest, but Michaelsen et al. argue otherwise. It is the structure of the assignments—not the students—that can largely cause, or correct, uneven student participation. Their research into organizational behavior suggests that successful group assignments will follow these four principles:

- **High individual accountability** – Individual preparation and performance is assessed
- **Required interaction** - Task cannot be completed by dividing and delegating
- **External comparisons** - Groups see how they do by comparison with other groups
- **Specific Reward for group success** – High-performing groups receive recognition

Learning sequences that follow these principles will foster a culture of accountability and cohesion of groups, while reducing social loafing.

**Step One. Students analyze a problem individually and make a decision about it before engaging in group discussion.** The purpose of this step is to ensure that all individual students have done the thinking for themselves, and are fully invested in finding a solution. Doing so prepares each person for active participation, as now he/she has a stake in what the group will do.

**Step Two. Students analyze the same problem as a group, and make a group decision.** Now the group combines its various perspectives and thinking to solve the same problem. Because each group member has already committed to an answer individually, the discussion is intrinsically interesting. There is a need for each group member to listen to and analyze each other’s thinking, in order to arrive at the best possible solution.

**Step Three. Groups are asked to report publicly the group’s decision, for comparison with other...**
Designing Effective Group Tasks

There are many ways to induce students to interact in groups. Some instructors might ask students to first consider a question or problem, and then group up in order to compare perspectives, create lists, identify examples, select a “best” example from provided materials, or write their own example in the form of a group paper. Group products can then be shared with the whole class in a follow-up discussion. All of these assignments can encourage higher-level thinking; however, not all are effective applications of the four principles of successful group tasks. To emphasize how these elements of design can be used to invent and evaluate potential group assignments, Michaelsen, Fink and Knight offer the following exercise based on assignments from an English Composition class:

Which of the following is the Best Group Assignment? Select the best answer:

(A) Make-a-list - “List the ‘mistakes’ that writers frequently make that detract from their efforts to write in active voice.”

(B) Make-a-choice - “Read the following passage and identify a sentence that is a clear example of a) active, and b) passive voice.”

(C) Make-a-specific-choice - “Read the following passage and identify the sentence in which passive ‘voice’ is used most appropriately.”

(D) Write a paper - Working as a group, write a 4-page paper that discusses and exemplifies the differences between active and passive voice.

In option (A), the “Make-a-list” assignment, little consensus is required, and therefore very little is at stake for individuals: social loafing is likely to occur. The second task (B) does a better job of requiring consensus, but because there may be many right answers, individual engagement will most likely drop off during the whole-class follow-up discussion. Option (D) is the WORST possible group assignment. Writing is highly individualized, and the logical way for students to complete this kind of group paper is to delegate tasks, jigsaw-puzzle style. The (D) option does not meet group-cohesiveness criteria, and creates unproductive tension between group-members with different work styles or achievement goals.

If you selected option (C), congratulations! You have successfully applied the principles for designing effective group tasks. In this example, individuals will feel responsible for contributing to the group’s decision, which has to be made public in a single voice. Group members must reach consensus, and there is an intellectual and emotional investment in selecting the “best” choice. If there are discrepancies between groups, this will spur discussion, leading to productive intellectual activity throughout the group task, and groups that have selected the right choice will receive social recognition from their professor and peers. In order to maximize the follow-up discussion on this type of assignment, plan a reportable group product or answer that is simple, clear, and immediately shows up differences between groups. One-word answers work well, and these can be represented by showing colored or numbered cards or using clickers.

Conclusion

The Make-a-specific-choice assignment does the best job of engaging students in small group discussion, and can be adapted to classes in all different disciplines. While Michaelsen elsewhere promotes full course design systems that promote ongoing group work and that apply these principles systematically (e.g., Team-Based Learning), simply planning group tasks using the four principles outlined here can help you to create more dynamic learning experiences in nearly any type of course.

The following texts are available for your further reading through the TTAL website: www.albany.edu/teachingandlearning

Click on Teaching Resources, select “General” from the drop-down menu, and then go to the section on “Teaching Methods.” You can always visit our offices at LI B69 to browse our book collection. We invite you to come by and discuss plans for the coming semester.

—Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development by L. Michaelsen, D. Fink, and A. Knight

—Three Keys to Using Learning Groups Effectively by Larry Michaelsen

—The Science Lecture: A Relic of the Past? by Eric Mazur

Adapted from the article, Designing Effective Group Activities: Lessons for Classroom Teaching and Faculty Development by Larry K. Michaelsen, L. Dee Fink, & Arletta Knight (1997), and originally published in: D. DeZure’s (editor) To improve the academy: resources for faculty, instructional and organizational development. Vol. 17. Stillwater, OK: New Forums Press. The original article can be found at the following link: http://speech.ipfw.edu/PeerReview/TLassignments.pdf