The Center for Learning \& Teaching Excellence
at ANDERSON UNIVERSITY

## Designing, Implementing, and Assessing Collaborative Group Assignments

Collaboration and Teamwork Dynamics is one of AU's Common Learning Outcomes (\#14 [TD]). Group work can teach critically important professional skills, but it can also be notoriously difficult to facilitate for both students and faculty - but it doesn't have to be. This resource is an overview of different approaches to designing, implementing, and assessing group projects, with some practical advice for managing groups and their work.

## When is Best to Use Group Assignments?

There are really two questions here:

1. Where in the curriculum are group assignments most useful?
2. When with an individual course should group work be assigned?

First question, first:
Some might feel that group projects are best reserved for upperclassmen, who are more
mature/academically capable (we hope), often have more rapport with their classmates, and are often in smaller classes that are easier to manage. However, I would suggest that group work should be imbedded at all levels in the curriculum, from the first year to the last, in both general education and major courses. Collaboration skills are like many other skills in the curriculum - they should be introduced, practiced and mastered at various levels.

Secondly:
Ideally, major group projects should probably come in the latter half of a course, in order to give plenty of time for students to learn content relevant to the assignment, and plenty of time of time to get to know their collaborators. If you are planning to create the working teams, rather than randomly assigning them or letting them self-select, this will give you time to assess individual strengths and weaknesses while organizing the teams to be the most functional.

## Planning Your Course Calendar - Other Concerns...

One of the challenges of group work is figuring out how to make room for it within the course, whether it is planned early or late in the semester. Especially if group projects will conclude with in-class presentations, the schedule can get crunched. Perhaps it will be necessary to cover less disciplinary content - a thought that does not sit well with many faculty members. Instead, try to embrace the idea of covering the content in a different way - by letting the students cover it. You can always build in some brief follow-ups if you feel like keys points are missing. Ask yourself what is most essential for students to take away from the course...

## Begin With the End in Mind.

Any well-designed course should be built upon clear learning goals in support of larger student learning outcomes for the program, whether those be SLOs (Student Learning Outcomes) for the major program, or CLOs (Common Learning Outcomes) for the Core Curriculum. How should students be able to demonstrate what they know, or demonstrate how to find what they need to know, or demonstrate that they can effectively use certain skills? Be clear with yourself and with your students about what you want them to get out of the course and the group project or activity. Covering content sometimes needs to take a back seat to skills development. At the end of the day, is it most important that they all know more about a certain topic, or are communication, negotiation, or leadership skills the critical take-away? If learning to work productively in a group is the main assignment objective, providing some instruction on interpersonal communication or group dynamics might be more valuable than another day or two of historical context related to the disciplinary topic at hand.

## How Many Students Should Be in Each Group?

Four members is generally thought to be an ideal number. This may vary according to the scope of the project, of course, but teams of more than four often get unwieldy, and can allow for team members in a large group to hide from the work, or for teams to function effectively without all members contributing. Neither scenario is ideal. Teams of only three can easily create a dynamic with one member becoming the odd person out, often being over-ruled in decision-making when they have the lone differing opinion. Groups of four will at least create the potential opportunity for a more balanced discussion, when debate arises.

## How Should Groups be Formed?

On the surface there are two options - let students self-select their team-mates, or you can assign groups for them (either randomly, or based on other criteria.)

## Self-Selected Groups:

In 100- and 200-level classes, it might be best to let students choose their own collaborators. They will tend to choose peers they know at least a little bit, which gives them somewhat of a head-start on establishing some sort of working rapport. Students who know each other will often tend to gravitate towards peers with similar levels of ambition and academic ability. This can have advantages. Highperforming, "type A," personalities who tend to take charge in group dynamics will have to learn to work with others who have similar inclinations, or they may have to learn to negotiate, or play other supportive roles, allowing others organize and direct the work to be done. Similarly, there are advantages for students who tend to perform less well. It is easy for students who would let others do most of the work hide in the corner, but if all students in a group try to follow that strategy, they will soon realize if they all wait to let the work fall on someone else, the work is not going to get done at all.

## Randomly Assigned Groups:

In upper-level classes, assigning groups presents other opportunities. Creating random groups for the students to work with may more closely approximate the sort of real-world experiences they might encounter in the work place or with other civic responsibilities.
Consider and Clarify the Necessary Roles.
Having students complete a self-assessment of their strengths and challenge areas may be helpful as they organize the work to be done. This can be done to assist you in forming teams for them, before they form teams for themselves, or the feedback/self-reflection can be helpful to them after teams are created. You might ask them to rate on a likert scale how they see themselves as a leader, an organizing facilitator, or contributing worker bee. Or ask them to identify whether or not they are good writers, researchers,
presentation builders, editors, video editors, etc. It will be helpful for you to provide a list of the skills needed to successfully complete the project, and design any skills/strengths self-assessments accordingly.

## Other Variations:

Allowing groups to trade members early on in the project can help resolve conflicts, or build up teams with new members who have needed skillsets. One colleague (Karen Zagrodnik) knows of a friend who allows groups to vote members off the team. The "loners" are then required to form a new team(s) with each other. Another colleague (Howard Murphy) creates a scenario where each member of the class has to create a pitch for their project, prior to groups being formed and the assignment getting under way. Then a day is set aside for the class members to pitch their projects and recruit team-mates. Or if their pitch is not going well, and a team is not forming around their leadership, students can seek out a team to join, and persuade the leader that their skills are valuable.

## How should group work be assessed?

Grading group work can be tricky. The best approaches make use of some combination of assessment by the faculty member, feedback on peers, and the students' own self-assessments. Transparency is key. You should make it clear to students that they will be evaluating their team mates - and that their team-mates will be grading them. Perhaps the final grade for each student is based $50 \%$ on your assessment, $25 \%$ on the grade student give themselves, and $25 \%$ on an average of the scores each student receives from their team-mates. Or perhaps there is an even split, with each source of assessment weighted worth $1 / 3^{\text {rd }}$ of each students' grade. Or maybe in a beginning class, students' peer evaluation might only account for $10 \%$ of their grade, while advanced students might have more responsibility for assessing each other.
However you slice it, providing clear rubrics, both for your own use, and for them to use for their own and peer assessments will be helpful, both in setting expectations, and for clarifying that they will each be accountable for some aspect of the work. It is suggested that you provide these up-front, but if they are clearly tied to each of the assignment objectives you provided, there should not be any surprises anyway.

## Trouble Brewing / How to Promote Accountability for Each Team-Member

Inevitably, frustrations arise. Someone is not getting their work done, another student can never come to work meetings, or someone is just bossing everyone around. What are some strategies for resolving issues, or better yet, heading them off at the pass?

## Individual Preliminary Work

Depending on the length of the project, early stages of the work can be assigned and completed (and graded) individually, so each team-member is already brining something to the table once the group project really gets underway.
Leverage the Available Tools
Odds are, the students will surely know how to use some app or another to create a group chat or message circle (and odds are, it won't be email), but it might be helpful to let them know of a couple of other tools. Encourage them to use Google Docs for collaboration, or something like Dropbox to share materials, of course, but don't ignore the functionality of the LMS to create groups and facilitate virtual discussions, meetings or work spaces. It might also be helpful to let them know about scheduling apps like doodle.com.

Interim Deadlines
For large/lengthy projects, eating the elephant one bite a time is almost always a useful strategy. But setting interim due dates - with grades for the work due at each stage - adds some teeth to the schedules that groups will need to adhere to in order to make progress.

## Work Contracts

As part of the assignment materials, you might create individual or team work contracts, which require the students to put in writing what they will contribute to the project.

## Meeting with the Groups

Building in time for you to meet in class or virtually with each group, to check in on their progress, can be an effective way to ensure that nobody is bailing out on their team-mates, or that the group isn't floundering with a lack of strong leadership or clear direction. Explicitly ask each group member to identify pressure points or frustrations with their progress. Ask them to suggest solutions. It is their work, but sometimes they might need a bit of guidance or mediation.

## Use Class Time as Team Time

Again, this might go against the natural instincts of a traditional lecturer, but setting aside some time for groups to work together in class can be beneficial. After all, it might be the only time each week when they know for certain they are all not going to be elsewhere. Just be sure to set clear expectation about what should be done in advance, or what they will accomplish during that class, or else some groups may not make productive use of the time.

## Peer Evaluations

Again, remind them that how they interact with their peers will have an impact on their grade. In this (or any) day and age, allowing them to give a few points on a rubric for civil behavior and showing respect for their peers might not be a bad idea.
Create Opportunities to Build Comradery.
Ideally, you won't teach three fourths of the class as a "sage on the stage," with all the students in neat silent rows, and then spring the Dreaded Group Project on them at the end of the term. Create opportunities for active discussion, or group activities throughout the semester. You might assign/form the working teams for various discussions and class activities all semester long, before ever assigning the major group project. This not only gives them time to get to know one another, but it might also allow you to observe and intervene if there are some significant interpersonal conflicts. Adjustments can be made to teams if needed, before the main project begins. Sometime you might have to make adjustments on the fly.

Find more Teaching and Learning Guides and Resource Documents under Teaching at auclte.com.

