





Active Learning Series

PART 7: Managing Student Groups in Active Learning

Working with others is foundational to many dimensions of learning. It prepares students for future jobs and studies by cultivating transferable skills such as interpersonal skills (i.e., active listening and effective communication), organizational skills (leading meetings, establishing processes), and individual and group time management (AAC&U, 2018; Finelli et al., 2011). In fact, having students engage with collaborative assignments and projects is considered a "high-impact practice," which means that it is an approach that can support deep learning, significant achievement gains, and positive differential impact on historically underserved student populations (AAC&U, 2022). Being transparent about the purpose of this type of skill-building can work to motivate students.

What are the Benefits of Collaborative Work?

The benefits of having students work in groups are well-documented in the literature, and include the following:

- Exposure to multiple perspectives
- Increased openness to diversity
- Increased occupational awareness
- Increased problem-solving abilities
- Persistence
- Engagement with complex and challenging objectives (Baepler et al., 2016)

In fact, how often faculty engage students in cooperative learning was found to be positively associated with changes to students' openness to diversity and challenge. In other words, the more students engaged in cooperative learning activities, the better their attitudes on diversity (Trolian & Parker, 2022; Loes et. al., 2018).

The benefits are not limited to students, but also extend to instructors. Group assignments can make grading more efficient and this allows instructors to grade fewer assignments, while providing more detailed feedback. Collaborative work also centers student-led discussions, which eases some of the burden of facilitating whole class discussions.

Considerations for Collaborative Work

Effectively implementing group work is conditioned on forward-thinking and backwards-planning. Below are four areas to consider as you design a group assignment or activity. Intentional design choices can help to mitigate some of the challenges associated with group work.

1. Define a clear and specific purpose for group work

Defining a clear and specific purpose for group work is important because it helps us to make decisions every step of the way – who should be working together, how big the groups should be, how we will assess learning, etc. To establish a purpose for group work, we might consider two questions: What are the benefits of having a *group* engage with the assignment/activity (as opposed to an individual approach)? What role does the group serve? For instance, perhaps students are working on individual writing assignments but meeting with their peers on a weekly basis for feedback. In this case, the

purpose of the group structure is for students to coach each other during the learning process. Other purposes for group work might be for students to hear different perspectives (for instance, sharing responses to a text) or working on a task/problem that is too complex for one person to take on alone. Once you've established a clear purpose, it is also important to communicate this purpose to students. In short, be transparent with students, as this will increase engagement and preempt resistance.

2. Determine how groups will be formed

Groups can be formed in a number of ways. Three of the most common approaches are student-selected groups, random groups, and instructor-selected groups. Each configuration has advantages and disadvantages, but ultimately, the purpose you've established for group work can help you decide which configuration will work best for the task at hand. For instance, if it is important for students to hear different perspectives on an issue, instructor-selected groups or random groups may work best. For quick in-class activities where students are working in a group for just a few minutes, allowing students to select their own group or work with the people seated near them may be a pragmatic choice. The figure below illustrates varied approaches to assigning groups, considering several questions. For more detail and an overview of the literature on group configurations, see <u>Baepler et al., 2016 p. 147-149</u>.

	Assigned Randomly	Formed by Students	Assigned by Instructor	
Type of work?	Low-stakes/ungraded activities	High-stakes/term projects	High-stakes, large/term projects	
At what point?	First few activities	Formed early after a few randomly assigned activities	Formed early after a few randomly assigned activities	
How much time?	Quick and easy	May take time Have them group together in class	May take time	
Level of equity?	More equitable to students who do not know anyone from class	Less likely to deal with requests to switch groups.	More equitable to students who do not know anyone from class	
Secondary goal?	Allows students to get to know each other	Practice responsibility and accountability for decisions	Distribute students (at the expense of relying on speculative class rankings).	
Level of diversity?	Higher chances of diverse working environment	Less adjustment. Comfortable working environment.	Guarantee diverse working environment	
Additional thought?	Disadvantage: Cannot account for accessibility and logistics for international students, students with disabilities, parenting students, etc.	Disadvantage: Some students came in with friends and are not branching out. Accessibility and logistics for students who were forced into a group.	Advantage: Can control aspects of accessibility and logistics for international students, students with disabilities, parenting students, etc.	

3. Build a foundation for group work

Before having students dive into a group assignment or activity, consider setting aside some time for them to establish a positive group dynamic. Doing so can help students discuss topics more freely, hold each other accountable, and address conflicts if they arise. One approach is to have students engage in some community building activities so that they can get to know each other and learn about each other's strengths and experiences as they relate to the task at hand. You might even have students talk about their previous experiences working in groups and reflect on what made some experiences successful and others less successful. Another strategy is to have students take on particular roles as they work in groups. Assigning roles can be particularly beneficial, for example, with structuring and focusing group interactions. In addition, group roles can both strengthen accountability and communication skills. Facilitator, recorder, presenter, questioner, and timekeeper are all roles worth considering (Washington University in St. Louis's Center for Teaching and Learning, n.d.). Finally, if students are working together for a longer term project, it may be helpful to have them establish community agreements for their group and/or create a team charter. A charter is a document where the team defines their goals, expectations, processes, and other details that will inform the way they work together. Similar to a charter, a group contract (Appendix 1) can also provide an effective foundation for group interactions.

4. Consider how you will monitor and assess student learning

Whether students are working on a short-term or longer term group activity, including some formative assessments provides accountability for students and helps you monitor student learning. These formative assessments might include having each group do a short verbal share-out of what they discussed or asking groups to turn in notes, a graphic organizer, or solutions. It may also be useful to have students complete a reflection or self-assessment in which they consider what they contributed to their group and what they learned from their peers. See examples of self-evaluations (Appendix 2) and peer-evaluations (Appendix 3). For summative assessments, you might consider a combination of assessment measures depending on the goals of the project. For instance, you may want to take into account the quality of the product that the group created, the group's processes and dynamics, and/or individual contributions and learning.

Promoting Group Success

While group work can have many benefits, it often presents significant challenges for students and instructors alike. Some of these challenges include:

- Unequal distribution of the work
- Interpersonal conflicts
- Groupthink
- A "divide and conquer" approach rather than collaboration
- Student resistance

It is also important to consider the scholarship which suggests that group work may negatively impact certain students disproportionately (e.g., students with anxiety, students with marginalized identities such as LGBTQIA+, or students with disabilities). This is not to say that group work cannot be effectively deployed with such student groups. For example, being transparent so students feel active learning helps them learn the content or implementing a group activity (e.g., Jigsaw) where students have time to prepare before sharing with their small groups, both lessen the potential student anxiety (Downing et al. 2020; Cooper et al. 2018; Cooper & Brownell 2017). Knowing and understanding the potential challenges and negative impacts can help prepare you to proactively create a culture that mitigates such possibilities.

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Additional Resources

- For ebook access to *Collaborative Learning Teachniques: A Handbook for College Faculty* (Barkley, Major & Cross, 2014), visit this site
- For more on using cooperative learning groups effectively from Vanderbilt University, visit <u>this</u> site
- For more on preparing for group work from UNSW Sydney Teaching Gateway, visit this site
- For more on project-based and dynamic collaborative learning from Vanderbilt University, visit this site
- For more teaching strategies on introduction to groups and teams from University of Michigan, visit this site
- For more on principles and examples to consider when assessing group work from the Eberly Center at Carnegie Mellon University, visit this site

Citation

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Group Members:





Active Learning Series Appendix 1: Group Contract¹

Date:
The success of a group depends on cooperation, collaboration and professionalism of its members. Effective collaboration includes, but is not limited to: 1) Participating fully (in spirit and actuality) 2) Participating professionally and respectfully (i.e. principles of community and abiding by the rules of academic integrity) 3) Addressing challenges as they arise in a respectful and communicative way
<u>Directions:</u> As a group, use these questions as a guide to create your contract.
GOALS : What are two goals that we want to accomplish as a group? What skills do we want to strengthen or develop?
Two Goals: 1.
2.
Skills:
EXPECTATIONS : What do we expect of one another in regard to attendance at meetings, participation, frequency & mode of communication, and quality of work?
Attendance at meetings:

¹ adapted from *NAS 165 Keepers of the Flame: Native American cultural burning and land stewardship in California*

Participation:
Frequency & mode of communication:
Quality of work:
Quality of Work.
AGREEMENTS : What are some guidelines that can help us to meet our goals and expectations?
AGREEMENTS. What are some guidelines that can help us to meet our goals and expectations:
ADDRESSING CHALLENGES: How will we address non-performance, in terms of these goals,
expectations, and agreements?
We share these goals and expectations and agree to these guidelines and approaches to addressing
challenges.
Group member name & Signature
Group member name & Signature
Group member name & Signature
Group member name & Signature
Group member name & Signature



Your name _____





Active Learning SeriesAppendix 2: Self-Evaluation for Group Work¹

Date				
<u>Directions</u> : In the space below, honestly evaluate your own work in the group project, by indicating the extent to which you participated in these activities. Use a scale of $1 - 3$ ($1 = Rarely$, $2 = Sometimes$, or $3 = Often$).				
Prepares work with intention and quality.				
Attends group meetings regularly and arrives on time.				
Contributes meaningfully and positively to group discussions.				
Completes group assignments on time or makes alternative arrangements for completion.				
Demonstrates a cooperative and supportive attitude.				
Contributes a fair share to the success of the project.				
If you were making a to-do list for yourself for t	the group project, what things are currently on it?			

¹ adapted from *NAS 165 Keepers of the Flame: Native American cultural burning and land stewardship in California*

2.	Μv	greatest	strengths	as a	aroup	member	are:
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- •
- •
- •

3. The group work skills I would like to improve are:

- •
- •
- •



Your name _____





Active Learning SeriesAppendix 3: Peer-Evaluation for Group Work

Date				
Directions: In the space below, hor name of each of your group members they participated in the following a Use a scale of $1-3$ (1= Rarely, 2)	ers in the columr ctivities.	ns. For each perso		
Evaluation Criteria	Group member:	Group member:	Group member:	Group member:
Prepares work with intention and quality.				
Attends group meetings regularly and arrives on time.				
Contributes meaningfully and positively to group discussions.				
Completes group assignments on time or makes alternative arrangements for completion.				
Demonstrates a cooperative and supportive attitude.				
Contributes a fair share to the success of the project.				

¹ adapted from *NAS 165 Keepers of the Flame: Native American cultural burning and land stewardship in California*

Feedback on group dynamics:



2. Provide one specific example of something you learned from the group that you probably would not have learned working alone.

3. Does the group have the resources (e.g., organization, communication, time, technology) to achieve its goals? Are there any additional resources needed?