

## 7 Tips for Designing Effective and Accessible Group Work

*Created in collaboration with the Disability Resource Center (DRC)*

As university instructors learn more about the benefits of using active learning techniques (such as [increased knowledge retention](#), [enhanced student performance](#), and the potential for more [equitable learning conditions](#)), collaborative group work is becoming more common. The following tips and strategies are intended to support instructors, in classes both large and small, to develop effective and accessible group work so that all students can benefit from the enhanced learning made possible in collaborative settings.

### 1. Match Group Work to Learning Goals

Begin with your specific goals for student learning, and consider how group work will support those goals.

Questions to consider:

- What configuration of group work and length of time will best support your goals? For example, is the goal for students to experiment with working with a new concept or idea together, or will students draw from interdisciplinary strengths to produce a more formal, finished product?
- Can the learning goal be met in **informal group work**, such as in a brief (2- to 15-minute period) in class? Or will achieving the learning goal necessitate **formal group work**, requiring students to coordinate meeting times outside of class?
- Will the collaboration be graded/assessed as a formal assignment, or will group work simply be part of regular in-class participation?

Examples:

- **Think-Pair-Shares** are useful if you want students to recall prior knowledge before learning new information, or to briefly process what they have just learned. Students usually talk in ad-hoc pairs or trios for 2 to 5 minutes, after thinking on their own first. Alternatives to this configuration include students thinking and writing on their own to reflect on and process new information.
- **Brief, in-class, small-group assignments** are useful if you want students to explore a new concept together, review their learning, or apply their learning to a new problem or situation during class time. Students check their own understanding when you review their work together as a class. There are usually 3 to 5 students per group, working for 10 to 15 minutes.
- **Longer-term, small-group assignments** are useful if you want students to apply their learning of multiple concepts and produce a more sophisticated product, such as a presentation, digital exhibit, podcast, etc.

## 2. Message the “Why” of Group Work

Students’ motivation to work together with their peers can increase significantly if the larger purpose and benefits of collaboration are clear. Explicitly communicate your goals for learning and how group work can help meet those goals.

Some benefits of group work include students’ ability to access diverse perspectives; receive social support and grow their peer networks; address more complex and interesting issues/problems than they could do on their own; and develop their own perspectives in relation to their peers. Instructors might also share with students that research in higher education settings shows that using collaboration in the learning process tends to [increase student learning and overall college success](#), or explain the value of teamwork skills in students’ professional and personal lives by offering real-world examples.

## 3. Create Groups with Inclusion & Accessibility in Mind

For many students, including students with disabilities and students whose identities are underrepresented in the class or in the discipline more broadly, **instructor-assigned groups** can reduce barriers to learning. There are many ways to assign (and alternate) groups for informal in-class assignments, as well as for more formal, longer-term group projects, including:

- **Colors/Letters/Numbers.** Assign each student a letter, number, and color (written out) at the beginning of the term, creating the preferred number of groups within each classification. You can then alternate groups by asking students to meet with their “color group” one day, and their “letter group” another day. Students can gain familiarity with their peers while also accessing a greater variety of experiences and perspectives.
- **Randomized Canvas Groups.** For informal, in-class groups, you can use Canvas to randomly assign groups. Go to “People” > “Group Set”, and then designate how many groups you want to create.
- **Student Strengths & Skills.** To build interdependence into a longer-term project, consider distributing particular types of knowledge and skills across groups (e.g., programming skills, design expertise, experience with particular kinds of research, interpersonal skills, disciplinary backgrounds, etc.). Ask students to complete a skills inventory to discover this information and to create groups incorporating a range of skills.
- **Practical Groups.** For longer-term projects that require sustained work, including time outside of class, consider creating groups so that students have an easier time meeting and coordinating their schedules. Group matches can be made by selecting for same section time, similar work schedules, similar living locations (e.g. living on campus v. in downtown v. over the hill).

## 4. Clarify Expectations & Establish Group Norms

In addition to making your expectations for group work explicit, it can be productive and motivating for students to collaboratively establish their own norms for working in groups.

Some questions that students can consider with their groups are:

- What are some positive and negative aspects of group work, based on previous experience? What strategies can uplift the positive aspects and reduce the negative aspects?
- What does the group want to achieve together? What are some mutual goals for this project? What is going to be the group's approach to accomplishing the goals of the project (e.g. specific steps, timeline)?
- How will members of the group communicate (text, email, Slack, etc.)? What are the expectations for how quickly members of the group will respond? What topics are allowable in those communication channels?
- What are the expectations for participation and communication during group meetings?
- How will the group manage a situation in which a group member(s) does not meet expectations? How will conflict be addressed and resolved?
- Who will be responsible for what, and by what deadlines?
- How will the team share work (e.g. on what platform, such as shared Google Docs, etc.)?

#### **4. Assign & Alternate Roles within Groups**

To create the conditions for equitable participation within groups, consider assigning roles to each student. For example, in short-term, in-class group work, roles can include Manager (time- and task-management), Presenter (communication with class and instructor), Reflector (consensus-building), and Recorder (documenting observations and findings). In longer-term projects, one student could be responsible for initiating and sustaining communication, another with coordinating schedules and organizing meetings, another with recording ideas and decisions at meetings, and another with keeping the group on task and managing deadlines. To promote equity and skill-building, roles should rotate so that each student has the opportunity to play different roles.

For examples of group work roles, see:

- The Eberly Center at Carnegie Mellon, "[Groupwork Roles](#)"
- The Teaching Center at Washington University in St. Louis, "[Using Roles in Group Work](#)"
- [Process Oriented Guided Inquiry Learning \(POGIL\) Role Cards](#)

#### **5. Devote In-class Time to Building Teamwork Skills**

Collaboration includes a variety of skills and cognitive processes that take on different forms in different contexts, and every student will come to the group work setting with a different comfort level and set of experiences with those specific skills. Student groups will be more successful if they have time to discuss and practice collaborative skills, and to meet with their groups, during class time.

These skills include but are not limited to: assessing the nature and difficulty of a task; breaking down tasks into smaller steps or stages; planning and strategizing; managing time; explaining one's ideas effectively to others; listening to alternative ideas and perspectives; building consensus; coordinating schedules and different contributions; responding to and resolving conflicts; and integrating the contributions of multiple team members.

In addition to dedicating time in class to addressing and practicing collaboration skills, instructors can break down a longer-term project into distinct stages with deadlines to support students to practice time management skills.

### **6. Build in Self-Assessment and Individual Accountability**

Self-assessment and reflection can increase students' awareness of their own learning as well as their contributions to their group. At the start of a group project, students can assess their own strengths and weaknesses in relation to their school work in general and to group work in particular, and to assess how both could affect group dynamics.

Throughout a group project, students can periodically reflect on their own and others' contributions to the group in relation to a set of collaborative learning goals, such as listening to and considering others' viewpoints, communicating effectively between meetings, keeping the group on track, meeting team deadlines promptly, managing conflict, and more.

Many instructors decide to include individual accountability within group work so that students avoid "dividing and conquering"—that is, learning the concepts or ideas only partially. Individual group members can demonstrate their learning via quizzes, regular reflections or journal entries, or some other individual submission such as a summary of their contributions, including a synthesis of what they personally learned in the process of the project and their own perspective on how the group managed decision-making and collaboration.

### **7. Talk Openly About Accessibility**

Discuss with students how your approach to structuring group work is intended to make group work accessible to a diversity of learners. At the same time, it's important to talk openly about each group's responsibility to ensure accessibility. For example, during group discussions in class, consider how a deaf or hard-of-hearing student might know who is talking when, such as asking speakers to raise hands, stand up if possible, hold a particular object, etc. Similarly, students can agree to allow one person to speak at a time so that all students and/or an interpreter can hear the discussion.

When a student has a Disability Resource Center (DRC) accommodation letter regarding group work, have a conversation with the student to learn more about their learning needs. Describe the kinds of group work and collaboration you plan to ask the class to engage in over the course of the term. While respecting the student's privacy, you can ask the student to describe their comfort level



with each “type” of group work situation, and discuss different forms of support during group work, or alternatives to group work, that can allow the student to meet the learning goals.

Discussing with *all* students the benefits of group work, and the strategies you will employ to assist with productive and equitable group work, can help to mitigate concerns for many.

**Resources:**

- The Eberly Center at Carnegie Mellon, “[Using Group Projects Effectively.](#)”
- The Center for Teaching at Vanderbilt, “[Group Work: Using Cooperative Learning Groups Effectively.](#)”
- The Teaching Center at Washington University in St. Louis, “[Benefits of Group Work.](#)”
- The Center for Research in Learning and Teaching at the University of Michigan, “[Guidelines for Using Groups Effectively.](#)”