GROUP WORK

A Quick Overview

What Is It?

Group work is defined as assigning two or more students team up to complete a task, such as an in-class activity or a graded project (Ahern, 2007; Toseland & Rivas, 2005). Ideally, group work asks students to work towards a common goal and, while doing so, (a) share responsibilities for achieving the goal, (b) interact with one another, and (c) contribute their individual knowledge and skills to the collaborative effort.

The terms *group work, cooperative learning,* and *collaborative learning* are often used interchangeably in most of the research on group work in higher education to mean group work. However, they are not interchangeable from educational researchers' perspectives: they refer to specific pedagogical approaches:

- Cooperative learning refers to a student-centered instructional approach in which students are assigned to small groups to work on a structured learning task and achieve a shared learning goal. Each student in the group is accountable for one part of the task (Salvin, 1995; Johnson & Johnson, 1999).
- Collaborative learning is based on the idea that learning is a social activity (Gerlach, 1994) and refers to an approach in which students gain knowledge by discussing and interacting with their peers.
- Group work simply refers to the process of having two or more students team up to complete a task

Benefits

A well-designed group work activity should:

- Improve students' learning effectiveness and make their learning more efficient by:

- Achieving better test and learning outcomes than likely to occur on their own (Springer, 1999). This occurs because students learn faster from their peers and feel less pressure to ask for help from their peers than from an instructor.
- Better retaining knowledge (Johnson & Johnson, 1989), because students need to communicate what they have learned to their peers regularly and in an easy to understand way during the group activity. This helps students gain a better understanding of the knowledge.
- Promoting active learning.
- Enhancing the motivations of individual students to learn (Felder & Brent, 2001). This occurs because students feel accountable to their groups and tend to spend more time preparing and learning the content for which they are responsible.
- Reducing individual students' workload on tasks (Joo & Dennen, 2017).
- Develop students' skills for future employment (Johnson & Johnson, 1989) by:
  - Improving their ability to work with others (Felder & Brent, 2001).
  - Improving their interpersonal communication skills.
  - Gaining active listening skills (necessary for successful groups).
  - Improving critical thinking skills (Fung et la., 2016) by discussing and sharing ideas with others.
  - Building leadership skills by motiving other team members, keeping everyone engaged, and considering the workloads of each person within the group.
  - Building conflict management skills by resolving disagreements arising during group discussions.

Besides the pedagogical benefits of the group work activities, administrative benefits, also exist, although the literature does not emphasize these. Group work for graded activities reduces the workload for marking by reducing the total number of assignments that an instructor must grade at the end of a term.

When to Use It

Table 1 below suggests a variety of instructional goals for group work, as well as specific group work activities that can help achieve those goals.

Examples of Pedagogical Goal	Activities to Support the Goal*	Details
Enhance students' understanding of course content by teaching others and sharing resources and ideas that individual students feel would benefit their peers.	Group journals	1. Each student in the group writes a summary of the same lesson content. 2. Each student shares the journal with the rest of the group 3. Students read one another's entries. 4. Students respond with reflections and additions (Parr, Haberstroh, & Kottler, 2000).
	Jigsaw (Aronson, n.d)	1. Break a large task into several smaller ones. 2. Each student completes one of the subtasks. 3. Then the group assembles their work. Examples of Jigsaw from SALTISE
Strengthen students' abilities to work in teams as they will likely do in the workplace.	Debate	1. Students are given an arguable point of view 2. Students are divided into two teams 3. Students take turns to present their arguments whether for or against certain point. Examples of Debate from SALTISE
Facilitate critical thinking and deep learning.	Debate (described in the row above)	

	Problem-based learning (PBL)(Wood, 2003):	1. Students are assigned to solve an open-ended problem using their experience and knowledge gained from the course and learning materials. 2. During PBL, students need to work together to construct their learning to solve the problem. Examples of PBL from SALTISE
	Peer-assessment (Falchikov, 1995):	1. Students grade each other's work 2. Students give feedback based on the criteria provided by instructors Examples of Peer Assessment from SALTISE
Create a peer learning culture (a learning community), in which students learn from their peers, a habit that is central to successful lifelong learning.	Icebreaker:	1. An activity that helps students who might not know each other to feel they belong the group and feel comfortable talking to each other. 2. It can be done by asking them interesting questions or asking each team member to tell about themselves.
	Brainstorming:	1. Each team member contributes one or more ideas 2. The team members discuss and generate new ideas.

Table 1. When to Use Group Activities

* Note: Several types of activities are available. The following are examples of some of them.

How to Use It

Effective group work requires careful design, facilitation and evaluation from instructors. Furthermore, groups need different types of guidance, depending on which of the three major stages of group work at which they are:

- Forming (getting started)

- Norming (performing their work)

- Storming (completing and evaluating their work)

When planning group assignments, therefore, consider the suggestions in Table 2 for supporting groups at each of the three stages. This includes guidance on choosing assignments suited to groups.

Phase of Group Work	How to Effectively Support Group Work
Choosing group Assignments	- If you have not overseen group assignments in the past, request training on designing and implementing group activities (Hillyard et al., 2010) - Identify the learning objective(s) that the group assignment is intended to support. - Make sure that the activity contributes to achieving that objective. - Choose authentic tasks—ones that would normally be performed by a group in the "real world" and that require several people to complete. These authentic tasks should help students achieve course-related goals and prepare for future careers (Peterson & Miller, 2004). - To the best of your ability, make sure that individual contributions to the assignment will be roughly equal in scope (Pfaff & Huddelston, 2003).

Forming (getting started)	• Consider whether you want to let students choose their own groups or you assign them to groups:
	
	    o Why you might let students choose their own groups: it helps reduce students' anxiety and they feel comfortable sharing ideas with the team members with whom they are familiar (Strauss & Young, 2011). Students in self-selected group have more positive feelings about group work (Chapman et al., 2006).
	
	    o Why you might assign students to groups: Depending on how you assign students to groups, you can facilitate particular outcomes:
	
	       • For better task-orientation: randomly assign students to groups. Assigned groups also tend to use time more efficiently compare to self-selected groups (Chapman et al., 2006).
	
	       • To promote interactions among diverse students, assign students to groups heterogeneously. This promotes diversity by gender, nationality or learning characteristics (depending on the characteristics used to assign groups) (Shaw, 2004).
	
	       • To help students have better group work experiences and learn more from those experiences, assign students to group heterogeneously (Curşeu & Pluut, 2013).
	
	       • To reduce obstacles to working together, assign students to group heterogeneously (that is, with differing abilities) (Soetanto & MacDonald, 2017).
	
	       • Also note that some research suggests that assigned groups perform better than self-selected ones (Halstead & Martin, 2002).
	
	 • Additional tips for assigning students to groups:
	
	    o If possible, consider students' previous experiences with group work (Curşeu & Pluut, 2013).
	
	    o Provide students a chance to try out groups on ungraded work before beginning launching them on graded assignments.

Norming (performing the work)	• Explain the purpose of assigning the activity as a group assignment and explain how working as groups promotes the type of learning intended through this project (Sockalingham and Schmidt, 2010, Hillyard et al., 2010)

- Provide clear instructions and expectations for the activity including (but not limited to):
  - A well-defined end product. The description should provide enough detail about the end product result that the group can envision what they should produce, but not so detailed that it takes away decisions that would be important for the group to make (Dingel & Wei, 2014)
  - A clear deadline for the project (and, if appropriate, intermediate drafts).
  - Guidance on how to divide up tasks among group members, if feasible (Channon et al., 2017)
  - Clear information on how the group effort will be evaluated (Gaudet et al.,2010).
  - Accountability of each student. Note that students' roles in each group should significantly affect their grades. *Followers* (students who focus on their tasks in the group instead of managing the group flow) typically receive lower grades than *non-followers* (group leaders) (Dingel & Wei, 2014).
- Allocate class time to let groups work. Because of individual class and work schedules, this might be the only time they can meet as a group. Also make sure and provide students with enough time (Pfaff & Huddelston, 2003).
- Provide ongoing support during the group work activities (Hillyard et al., 2010):
  - Check-in with students at several points during the group activity (Burdett & Hastie, 2009) to discuss their progress.
  - Collect feedback on students' satisfaction with the activity and, if needed, make necessary changes in response to students' comments (Burdett & Hastie, 2009)
  - Make a special effort to check-in with minority students in groups, focusing on whether they have challenges or concerns related to the task (Hillyard et al., 2010).
  - Promote ongoing communications between groups and you (and teaching assistants, if you have them) (Hillyard et al., 2010).

	Communications should come from both students and instructors' sides and could simply be updates about the project (Hillyard et al., 2010)

Storming (completing and evaluating the work)	• For formative evaluation (evaluation of the ongoing group activity before they submit their assignments)
	  o Provide continuous feedback about the group project to students.
	  o Encourage students to keep logs for each phase of their group work; these logs provide insights into the group experience each had.
	• For *summative evaluation*—evaluation of the resulting work—combine:
	  o Peer evaluation tools or models to evaluate individuals' contributions in the group work (Gaur & Gupta, 2013; Willcoxson, 2006). Tools and models available include:
	    • Peer-rating, in which students grade one anothers' performance and contributions.
	    • Self-rating, in which students grade their own performance and contributions to the group (Johsonton & Lynden, 2004).
	    For both, provide students with detailed performance criteria for assessing their team mates and themselves to guide them towards fair assessments and frank self-assessments.
	• Monitor freeloading—when one student lets others over-contribute to benefit from their contribution. To determine whether this occurred, ask students to submit individual progress reports or use peer ratings to weight each other's contribution (Pfaff & Huddelston, 2003)

Table 2. How to support groups

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